

REPORT

TWO YEAR STRATEGIC ACTION PLAN DEVELOPMENT OF MONGOLIAN ASSOCIATION OF MEAT EXPORTERS (MAME) INCREASING THE EXPORT OF LIVESTOCK PRODUCTS FROM MONGOLIA



BY

DR. WILLIAM ALBANOS JR.

THE MEAT SHEET, INC.

P.O. BOX 124

WESTMONT, ILLINOIS 60559

Tel: 630-963-2252

Fax: 630-963-2980

E-mail: MEATSHEET@AOL.COM

FOR

ECONOMIC POLICY SUPPORT PROJECT (EPSP)

DEVELOPMENT ALTERNATIVES INC. (DAI)

CHIEF OF PARTY

BILL BIKALES

February 2000

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
INTRODUCTION AND JUSTIFICATION.....	4
Marketing Board Coordination Alternative	6
Current Impediments to Increasing Exports.....	7
Long-Term Issues	7
Short-Term Issues	7
NEW PRODUCTS SUITABLE FOR EXPORTING	9
Pre-Minced, Cooked, Flavored and Flash Frozen (IQF) Manufacturing Beef	9
Various Boneless Fresh Frozen Meat Items	10
Tinned Meat Products	11
Dry Sausage and Snack Food Products.....	11
Fresh and/or Frozen Lamb and Goat Carcasses.....	12
Pharmaceutical Glands	12
CURRENT SITUATION	13
Table 1—Mongolian Prices USD/Ton	13
ASSURANCES FROM IDENTIFIED DEVELOPMENT ASSETS	17
Figure A—Dr. Eng. S. Deleg, President of MAME	17
Figure B—Dr. Yadam Balgansuren, Chairman Sector Policy, Ministry of Agriculture and Industry	18
Figure C—Dr. Ochirhuugiin Ulambayar, Chief of State Veterinary Service, Government Agricultural Implementation Agency and Ch. Namjildorj, Head of State Control Committee for Veterinary Livestock Ministry of Agriculture, State Inspection Agency	18
Figure D—D. Boldbaatar, Director, Foreign Trade and Economic Cooperation Department, Ministry of External affairs and Davaasambuu D., Deputy Director, Foreign Trade and Economic Cooperation Department, Ministry of External Affairs	19
Figure E—Ms. Jeanne Bartholomew, Project Director ACDI/VOCA, Mongolia.....	19
Figure F—Mr. Stephen Vance, Chief of Party, Gobi Regional Economic Growth Initiative.....	20
SYNCHRONIZED STRATEGY	21
Agenda of Concrete Measures	21
Activity Timeline Diagram	30
Activities with Identified Resources.....	31
Table AA—Establishment Package	31
Table BB—Marketing Package.....	32
Table CC—Veterinary Package.....	33
Table DD—Data Package.....	33
ACHIEVEMENT VERIFICATION CRITERIA (AVC).....	34
CONCLUSIONS	41
RECOMMENDATIONS	45
APPENDIX A—Interview with Dashkhun Gerelkhuu, General Director, Meat Processing Factory of Bagakhangaal (BMF)	48

APPENDIX B—Interview with L. Ganpurev, Vice-President and Badraa Boldbaatar, Vice-Director, Darkhan Meat-Expo, Darkhan-UUL.....	49
APPENDIX C—Meeting with Membership of Mongolia Association of Meat Exporters (MAME).....	50
APPENDIX D—Interview with Mr. Bayarsaikhan, Founder, Eviin Huch Co., Ltd.....	51
APPENDIX E—Interview with Mr. D. Gerel, Deputy Director, Meat Processing Combinat, Makhimpex.....	52
ANNEX AA—Website Address For Selected Countries' Import Requirements	53
How to use the Export Library	53
Country Requirements Changed in the Last Calendar Year in Chronological Order	53
Country Requirements -- Alphabetical Listing	54
Eligible Plant Listings Changed in the Last Calendar Year in Chronological Order	55
Eligible Plant Listings -- Alphabetical Listing	56
Export Notices	56
FSIS Directives Related to the Export of Meat and Poultry	57
ANNEX BB—Tinning Methodology	58
Base Plate	58
General	58
Types of Plate.....	58
Solder	58
Types of Meat Cans.....	59
General	59
Sanitary Cans	59
Can Line	59
Enameling	60
General	60
Types of Enamels	60
Preparing Inner Surface of the Cans	60
Vacuum Requirements.....	61
Thermal Exhausting	61
Mechanical Exhausting	61
Luncheon Meat (Spam Type).....	61
ANNEX CC—Sample Ontario Marketing Board Activities	62
Table 2—Negotiating Boards	62
Table 3—Boards That Establish Price	63
Table 4—Boards That Regulate Production With Marketing Quotas	65
ANNEX DD—USMF Fact Sheet, Mission Statement, Member Services, and Application	67
U.S. Meat Export Federation Fact Sheet	67
U.S. Meat Export Federation Mission Statement.....	68
U.S. Meat Export Federation Member Services	68
U.S. Meat Export Federation Application	70

EXECUTIVE SUMMARY

Heavy reliance on exporting of a basic commodity, frozen carcass beef, to the Soviet Union in the 70s, 80s and 90s has caused the underdevelopment of meat export marketing expertise and/or value-added meat product production in Mongolia. This has left today's Mongolian meat exporter at the mercy of the large Russian monopolist and/or monopsonist trader on the Siberian border. Moreover, this ***links the Mongolian exporters to the volatility of the Russian economy***.

However, recent activities in the World Trade Organization (WTO) have increased the incentives for Asian countries to open borders and increase trade. Grounded on the recommendations of the author's prior report to expand livestock product exports, the Mongolian government has recently (June 1999) taken ***concrete first steps to assist in increasing Mongolian meat exports***. It has resolved that the appropriate Ministries undertake measures to implement technical renovations, introduce new technologies, develop meat studies, advertise Mongolian livestock meat in foreign markets, and find funding for these measures from foreign aid and/or loans and domestic resources. Additionally, they should undertake to act to implement other measures deemed essential. This means that the chance for increasing trade beyond Siberia and unlinking from the Russian economic cycles has never been better. The report examines the ***"government intervention" approach*** using Marketing Boards or the ***"free market"*** approach using a privatized approach to address the issue.

Depending on the ***"comparative advantage"*** enjoyed by Mongolia in livestock production does not necessarily mean success in increasing exports. Exporting is only a means to an end in a transitional free market society. The end is "making money" and the means is selling livestock products across the borders—"exporting." The key to the ultimate success will be to develop a favorable ***"competitive advantage"*** in exporting. This report discusses some of the long-term and short-term issues that can both increase exports of livestock products and increase competitiveness.

One major first step suggested is to investigate the requirements of each nation targeted (Southeast Asian and Middle Eastern) for export (see ANNEX AA for Websites). Once the rules have been identified, Mongolian exporters can immediately start marketing to these economies. A major impediment exists to increasing exports to more developed economies. This is the ***structure of the veterinary inspection system at export slaughter plants in Mongolia***. Most developed economies have government-supervised and -paid inspectors doing ante-mortem and post-mortem inspection at privately owned slaughtering plants. They are certifying each individual animal as healthy. The balance of the inspection activity (carcass dressing and boning—food handling safety issues) may be under government supervision of plant employees using HACCP procedures.

This government/private sector relationship is designed to ***eliminate a conflict of interest*** between the plant and the veterinary inspector certifying each animal as healthy. As long as this government/private sector relationship does not exist in Mongolia export plants, limited progress for exporting to developed and some

developing economies can occur. In an economy like Mongolia's, this was never an important issue because plant state employees were employed at a government-owned slaughtering plant. Only now, because of the privatization process does this issue surface.

Several products that would add value to the export industry are discussed in this report. They are: 1) Pre-minced and cooked flash frozen beef and/or seasoned beef crumbles; 2) Boneless beef carcasses, major muscle boneless beef cuts, boneless beef trimmings, and boneless mutton; 3) Tinned meats of various varieties; 4) Dry sausage products of various varieties; 5) Small fresh and or frozen lamb and goat carcasses; and 6) Pharmaceutical industry-type glands and organs.

The report suggests an autonomous Mongolian export center institution to be the "private sector" focus of increasing exports. The report outlines the functions and criteria that might be followed in creating a private and/or quasi-government institution. The organizational structure of the U.S. Meat Export Federation might be the basis of a suggested model to mirror. This report is to ***propose a two-year program that creates a "strategic-fit"*** between the different "native" and "donor" development assets available in the Mongolian circumstance. This plan will identify and outline the coordination of these capabilities.

In response to the original report's suggestions, nine major private participants have organized (November 1999) an NGO association, ***The Mongolian Association of Meat Exporters (MAME)***. Recently, after lengthy discussions with the MAME leadership and the responsible Ministry of Agriculture officials, the government veterinary presence on the slaughtering line of export processors is resolved by the beginning of the year 2001. Industry leaders have committed to installation and implementation of HACCP programs in their plants by the same time. This solves a stated major impediment to expanding export markets.

The *planned actions recommended* over the next two years are illustrated in The "Time-Line of Activities" and detailed in Tables AA through DD "assurances from identified development assets."

Interviews with "native" and "donor" individuals/organizations have disclosed certain commitments to promote and assist the implementation of the MAME goals. See Figures A through E for *enumeration of commitments*.

This study has functionally been divided into several phases. The accumulation of information phase, the determinations of the requirement phase, the design implementation phase, and finally, the actual implementation of action phase. The next logical assumption is that *achievement verification criteria*, herein referred to as (AVCs), are developed so that the implementation activities have some measurable deliverables associated to gauge achievement.

A section will suggest a level of expectations associated with the action submitted in the "Activity Time Line" diagram, designed to spell out the activities over the two-year implementation phase. The actual deliverables expected—from the actions outlined in Tables AA, BB, CC, and DD at the end of each six-month period—will be the focus. For example, we suggest the activity of travelling to

China and/or Siberia to contact potential buyers. However, the actual activity of making trips is not the goal; the journey must be closely related to the increasing of export transactions. Therefore, a reasonable deliverable should be the number of actual completed transactions compared to some past period and not the number of trips taken. Also, it is suggested a six-month report should be prepared by EPSP outlining the actual level of deliverables associated with the different activities. This **document should establish if the aid-in-kind and/or funds expended have been effectively deployed and the next six month program** continued.

The actual **outlining of a second year deliverable will be very complex and redundant** until a clearer understanding of the actual results during the first year have been experienced. The deliverables during the second year will be extensions of the first years deliverable and are not repeated herein.

Appendices A through E detail the interviews of participants whose impressions influenced the conclusions and recommendations. **Sixteen conclusions are explained in detail** as to the “state of Mongolian export” industry and **fourteen specific recommended actions are outlined herein**.

INTRODUCTION AND JUSTIFICATION

The Mongolian government has passed a resolution, number 101, June 1999 creating a government action plan and implementing a program to promote export of livestock meat product production. The proposition resolves that the appropriate Ministries undertake measures to implement technical renovations, introduce new technologies, develop meat studies, advertise Mongolian livestock meat in foreign markets, and find funding for these measures from foreign aid and/or loans and domestic resources. Additionally, to act to implement other measures deemed essential.

Based on a recent government report (Mongol Livestock Meat in the Market, p.8), meat exports for the year 2000 are projected to increase by 63 percent from 1999 levels. The report predicts exporting a total of 32,600 tons of carcasses, of which 16,300 tons are of beef, 3,300 tons are of horse, 8,200 tons are of sheep, and 4,800 tons are of goat. The report suggests that the Mongolian economy would earn 3,429.1 million tgs¹ from exporting carcasses, offal and casings and 5,190 million tgs from the sales of animal skins. The report also suggests that if meat factories and domestic hide factories could work at their capacities, they could generate 1.5 thousand people's employment. Accelerating the increase in the level of exporting and expanding the percentage of value-added meat products exported from the value chain could greatly enhance this outcome.

The heavy reliance on exporting of a basic commodity, frozen carcass beef, to the Soviet Union in the 70's, 80's and 90's has caused the underdevelopment of meat export marketing expertise and/or value-added production. This has left today's Mongolian meat exporter at the mercy of the large Russian monopolist and/or monopsonist trader on the Siberian border. Additionally, the rest of the world has progressed in the area of animal health and sanitary food production standards, leaving the Mongolian processors at a disadvantage. Furthermore, Mongolian veterinary and food safety standards are comparable to the Russian standards. This factor increases the dependence of Mongolian exporters on Siberian imports of frozen carcasses², thereby constraining flexibility of processors to sell in other markets. This links the Mongolian exporters to the volatility of the Russian economy.

Recent activities in the World Trade Organization (WTO) have increased the incentives for Asian countries to open borders and increase trade; for example, China now expresses interest in importing sheep meat, which to-date it has resisted importing meat from Mongolia. Rumors published in the *Email Daily* suggest massive large-scale smuggling of meats to Inner Mongolian merchants. Other Asian and Mid-East nations will come under pressure to open trade and relax their protectionist tendencies. Purchasing of HALAL (Islamic) and KOSHER (Jewish) slaughtered fresh lamb and goat demand is on the upsurge as oil

¹ 1,038 tgs equals \$1.

² Russian buyers maintain an upper hand by trading in frozen carcasses alone. They purchase at times and prices advantageous to them only. They then bone frozen carcasses after delivery, thereby gaining greater "value-added" pricing for themselves and the Russian sausage industry.

revenues rise. This means that the chance for increasing trade beyond Siberia and unlinking from the Russian economic cycles has never been better. We must address these marketing and sanitary issues as soon as practical—in other words, “strike while the iron is hot.” Furthermore, Mongolians must be encouraged to change the array of meat products they export, to forgo exporting live animals, lessen dependence on sales of frozen beef carcasses to Siberia, and evolve programs for value-added product production and exporting.

MARKETING BOARD COORDINATION ALTERNATIVE

In the Mongolian situation, there are many livestock producers (herders), all producing nearly identical products. This can lead to supply exceeding demand and to livestock prices becoming quite depressed, especially if exporting is restricted. So long as expected prices exceed estimated out-of-pocket costs, the individual herder will produce. This forces price still lower and makes the problem even worse. Although, the market is clearly signaling that production should be cut back, the individual herder often struggles to increase production and experiences a great deal of economic hardship, particularly the less efficient or marginal producer.

Many nations have been unwilling to allow agriculture to endure the full economic hardships of a completely “free market.” Hence, worldwide government intervention, in many different forms, has been employed over time to protect the sovereign farm sector. Government programs have direct impact on coordination of the food system through price supports, direct production controls, and national and regional marketing orders and agreements. Government interference using production controls has varied greatly and has met with varying degrees of success. Other forms of government price manipulation, subsidies, and other “non-free-price” marketing programs have been employed worldwide to address these issues. One “so-called” attractive scheme has been the establishment, by legislation, of marketing boards.

Marketing boards are powerful marketing agencies with the combined powers of co-operations, marketing orders, and bargaining associations. They are quite common in Canada (see ANNEX CC for Ontario example) and are operating in Australia, New Zealand, France, England, and Africa, all countries that have placed restrictions on the “free market” system for certain commodities.

Marketing boards are essentially “producer-controlled” organizations with government monopoly power over a broad range of farm production and marketing activities. The chief functions of operating boards are:

- Collective bargaining and price negotiation, acting as a single agent for all producers of the commodity.
- Sole marketing agent for the commodity, with broad controls over all aspects of marketing, including the ownership of storage facilities
- Sponsorship of market intelligence activities and market research.
- Producer pooling arrangements to divide receipts among farmers.
- Setting production and marketing controls and quotas.

Although there are not yet any fully operating marketing boards in the United States, as the American farmer has shown mixed interest in them. However, some elements of the marketing board concept are used in regional situations, especially the highly perishable fruit and vegetable markets in California. No widespread use of these concepts has been accepted in the United States livestock and meat industries. Nonetheless, the propensity to embrace this type

of intervention even in the “free-market” notion is very strong. Augments that organized coordination offered by public legislated boards and other such schemes are very persuasive. The number of economies that use this type of approach attests to the strength of the augment that it produces desirable results.

Current Impediments to Increasing Exports

There are numerous issues to be addressed when discussing impediments to increasing exports. Some of the issues require long-term solutions while other need be looked at in the short-term.

Long-Term Issues

Depending on the comparative advantage enjoyed by Mongolia in livestock production does not necessarily mean success in increasing exports. Exporting is only a means to an end in a transitional free market society. The end is “making money” and the means is selling livestock products across the borders—“exporting.” The key to the ultimate success will be to develop a favorable competitive advantage in exporting.

The governments’ Ministry of Infrastructure and the Transportation Industry must address issues like transportation availability, 20-40 ton container shipments, harmonized and competitive freight rates, and lack of roads between urban centers. Nevertheless this report presents a recommendation to help mitigate the lack of organized transportation southward.

Additionally, there are subjects like the genetic pool of Mongolian animals that at the current time produce slow-growing, small, low-yielding muscle animals. These issues are beyond the scope of this report and will not be addressed, since they do not hinder any short-term solutions to expanding exports. These issues will only act as constraints on the extent of any successful expansion of exports. Nonetheless, this report will discuss some of the short-term issues that can increase exports of livestock products.

Short-Term Issues

A potential importing country certification of livestock disease-free zones in Mongolia is a major issue to be addressed before large scale exporting can occur. Possible importing countries being targeted do not all have the exact same requirements. One major first step will be to investigate the requirements of each nation targeted for export (see ANNEX AA for Websites). Once the rules have been identified, Mongolian exporters can immediately start marketing to these economies. In addition, a partial solution could be to partition and get only specific regions of Mongolia certified instead of waiting for all of Mongolia. Of course, exporting of cooked (IQF or tinned) and dehydrated (dry sausage) products might bypass this issue.

The sanitary approval process for the United States is identified. This requires the Chief of Veterinary Mongolian Government Service (Dr. Ochirhuugim

Ulaanbaatar) to write a letter to an identified USDA policy official,³ stating the products to be exported and requesting such approval. Then USDA sets in motion a complex procedure to evaluate the details of the situation for approval (see Annex GG of the original report). This requires a lengthy period of investigation and consultation between governments and should be initiated regardless of any preconceived outcome.

However, another major impediment exists to increasing exports. This is the structure of the veterinary inspection system at export slaughter plants in Mongolia. Most developed economies have government -- supervised and paid inspectors doing ante-mortem and post-mortem inspection at privately owned slaughtering plants. They are certifying each individual animal as healthy. The balance of the inspection activity (carcass dressing and boning—food handling safety issues) may be under government supervision of plant employees using HACCP procedures⁴. This government/private sector relationship is designed to eliminate a conflict of interest between the plant and the veterinary inspector certifying each animal as healthy. As long as this government/private sector relationship does not exist in Mongolia export plants, limited progress for exporting to developed and some developing economies can occur. In an economy like Mongolia's, this was never an important issue because plant state employees were employed at a government-owned slaughtering plant. Only now, because of the privatization process does this issue surface.

³ Mark Manis, Director International Policy division, Food Safety Inspection Service (FSIS), United States Department of Agriculture (USDA), Washington, DC 20250. Phone 202-720-6400, Email clark.danford@usda.gov.

⁴ A written plan of inspection for food safety that is implemented by the plant itself, but randomly monitored by government inspector -- ISO 9000 systems are similar and are accepted SOP standards worldwide. Seven principles of HACCP 1) Conduct a Hazard Analysis, 2) Identify Critical Control Points, 3) Establish Critical Limits for each Critical Control Point. 4) Establish Monitoring Procedures, 5) Establish Corrective Actions, 6) Establish Record keeping Procedures, and 7) Establish Verification Procedures

NEW PRODUCTS SUITABLE FOR EXPORTING

Several products that would add value to the export industry are listed below.

1. Pre-minced and cooked flash frozen beef and/or seasoned beef crumbles
2. Boneless beef carcasses, major muscle boneless beef cuts, boneless beef trimmings, and boneless mutton
3. Tinned meats of various varieties
4. Dry sausage products of various varieties
5. Small fresh and or frozen lamb and goat carcasses
6. Pharmaceutical industry type glands and organs.

Many studies have suggested that products from the value chain as outlined above have expanded exports faster than trying to increase exports of lower valued commodity (raw materials).⁵

NEW PRODUCTS SUITABLE FOR EXPORTING

1. Precooked ground beef and/or seasoned crumbles
2. Boneless beef and mutton
3. Canned meats and stews
4. Dry sausage such as pepperoni, jerky, and slimsticks
5. Air-shipped, unrefrigerated small lamb and goat carcasses
6. Livestock glands and organs supplied to pharmaceutical industry

Pre-Minced, Cooked, Flavored and Flash Frozen (IQF) Manufacturing Beef⁶

This is a very unique product and is widely used in many parts of the world. One major benefit is that the product is pre-cooked and can overcome some of the health restrictions posed by the “disease free” zone certification that many economies require for fresh frozen but not for pre-cooked meats. The processing is not complicated, as outlined herein.

The meat trimmings will go into a grinder. The grinder will have a 3/8-inch kidney plate on the front producing a large size piece. The product will then be transferred to the blender either in vats or automatically through an agar. Then seasoning, water, and soy might be added, as desired. The product, once it completes the cycle, will then be augured into the marlin or jet knife, where it will be cut into the particulate size required. The particulate will drop on to a conveyer and then into a fryer or oven or microwave, depending on what type of system is in place. The difference in these three options is that the fryer will create a dark brown color product, the oven will create a light brown color and the microwave or kettle cooked product, a grayish color. The other major difference between cooking systems is that the kettle and microwave will retain moisture in the product. The fryer and oven will tend to render out the product more and reduce yield. Once the product is cooked, it will pass through a shaker that will jar the

⁵ See studies of rubber and other commodity examples shown at J. T. Austin and Associates “Competitive Seminar”

⁶ You will need the following equipment to produce a cooked fresh or seasoned crumble: 1. A chopper or flaker if you plan to start with frozen trimmings—Alpeen is one brand suggested; 2. A grinder (mincer) for the meat—Hobart and Wolfking are two brands suggested; 3. Need at least one electronic cell blender; 4. A marlin or jet-knife cutter; 5. A fry line or cook oven or microwave line; 6. a shaker; 7. A freeze tunnel (CO2 or nitrogen); 8. Another shaker; and 9. A key-pack bagging machine.

particulate free from each other in the event that they bind together from the cooking process. The product will then go through a freezing system. Nitrogen is actually the best system due to the fact it is manmade verses the CO₂ from the earth and is subject to natural conditions and availability. Again, the particulate passes through a shaker and screen to achieve the exact sizing the customer requests. From this point, product will proceed down conveyer into key-pack system where it will be scaled and packed into exact weight poly bag packages. Product is bagged in flexible material (polyethylene), sealed, and usually bulk packed into 25+ kilogram cartons for shipment.

Various Boneless Fresh Frozen Meat Items

Several problems exist for the Mongolian meat processor in the production and sale of boneless beef, horse, pork and mutton. First, at the present time, the major customer is the Russian monopsonist who only wants to purchase Mongolian carcasses. This is because they want the value-added of boneless to incur to the Russian meat industry. Therefore, the price offered to the Mongolian processor is not at a level of profitability. Since the processor has not developed alternative customers, the choice is to sell cheap carcasses or even cheaper boneless, and the Mongolian processor usually decides to sell mostly carcasses. Second, the development of inedible processing is woefully underdeveloped in Mongolia. Efficient use of bones processed into bone meal for animal feed and inedible oil products for soap manufacture is nonexistent. Lack of these facilities then forces the costs of boneless to be higher, as well as a more complex sale, as bones are not bringing the highest value back to the processor.

The sophisticated world buyer of boneless meats is interested in several aspects of the quality of product. One aspect is the quality of the boning process itself. For example, what is the level of bone chips, cartilage (gristle), and blood clots left on the boneless product. Bacterial flora and chemical contamination is also of great concern. The second aspect is the fat-to-lean ratio of the boneless product. The major use of frozen boneless around the world is for manufacturing purposes. Hence, the value of the product is in direct correlation with this fat-to-lean ratio. The market usually prices the product based on this criterion. In other words, 90 percent lean product has a higher value than 85 percent lean, then 75 percent lean, then 60 percent lean, and the lowest price is assigned to the 50 percent lean. Buyers then formulate their recipes according to the price and fat relationship. The removal of major cuts from the boneless products usually raises the fat content of the remaining meat. Chemical fat analysis of the material to verify the fat content is the usual methodology used by the buyers.

The processing of carcasses by cutting into primal cuts for separating the more valuable sections used for table meat and the boning of the primal to produce trimmings used for manufacturing is the methodology that needs to be studied by meat processors in Mongolia.

Tinned Meat Products

In designing tinned meats for the export market, Mongolian meat exporters must consider many factors. They must develop foods that will appeal to foreign consumers in Siberia but also are especially targeted to Southeast Asian and Mid-Eastern countries. They can be convenient and low cost and still have a distinctive Mongolian character. They also can be designed to fulfill a specialized demand. In other words, “learning the customer.” The exporter cannot disregard the competition offered from fresh meats. Nevertheless, tinned meats can be given further preparation in the kitchen at home and thereby offer an alternative to fresh meat, especially in tropical type climates that are not conducive to efficient livestock production. Unofficial research has suggested a demand for desirable Mongolian tinned meat in countries such as Philippines, Malaysia, Indonesia, Viet Nam, Thailand, etc. The first market research should be to purchase tinned meats samples sold in Siberia, as many Eastern European meat processors produce huge quantities of tinned meat varieties that could be duplicated and even improved by Mongolian processors. Secondly, using a simple market survey methodology would be to send “shoppers”⁷ into the major outlets located in the foreign urban areas of interest (Southeast Asian and Mid-Eastern warm climates). They should be able to collect data by observation on the type of tinned meats imported as well as the most popular packaging desired by local population. After evaluation of data, samples can be collected and shipped back to Mongolia for duplication and enhancement. ANNEX BB contains the methodology for can manufacturing as well as a basic recipe for the ever-popular SPAM type product

Dry Sausage and Snack Food Products⁸

Dry sausage can take many forms. In the U.S., snack sticks and jerky are in demand all over the country. Worldwide demand for these products is exploding. These are convenient, nutritious products that can be used anytime. Pepperoni, among others, is another popular dry sausage that can be used. There are many other types of dry sausage listed in Dr. John Romans’ (Gobi Project Volunteer) book *The Meat We Eat*, pp. 832-840, that could be excellent candidates for the export markets being targeted. Based on Dr. Romans’ observation, areas of Mongolia have the climate that would provide the most desirable natural drying conditions in the world to make dry sausages.

The product could be made of muscles and animals where the most value can be added to the entire livestock and meat industry of Mongolia. This sausage will be made safe to hold and distribute under many conditions, due to low pH, dryness, salt, and nitrite, along with nutritious muscles of many Mongolian species.

⁷ A “shopper” is a person sent into a situation disguised as a typical shopper but is really doing qualitative market investigations. This is common methodology used by western companies to self-evaluate services given by the staff to customers

⁸ Based on findings from report GOBI REGIONAL ECONOMIC GROWTH INITIATIVE, John Romans, December 1999

Products can be labeled “Made in Mongolia” and be made to reach the same level of world recognition that “Made in Mongolia “ cashmere enjoys.

Fresh and/or Frozen Lamb and Goat Carcasses

Purchasing of HALAL (Islamic) and KOSHER (Jewish) slaughtered fresh lamb and goat demand is on the rise. Since the increase in world oil prices over the past year, the economies of oil-producing nations of the mid-east have been expanding. Past interest from Jordan in fresh-slaughtered, unrefrigerated product flown directly from the Mongolian plant and exported to the street markets in the Mid-East countries is feasible. This potential demand must be exploited, as Mongolia has comparative advantage and competitive advantage in the supply of this type of product and has airstrips near the slaughtering point (Bagakhangai).

Pharmaceutical Glands

There are many non-muscle (glands and certain organs) parts of the slaughtered livestock that are extremely highly valued by the pharmaceutical industry. For example, PERICARDIA (heart sack), SUPRENAL (thorax gland), TRACHEA, (lung, throat), SPLEEN, AORTA, and FETAL BLOOD. Low volume and high quality control requirements most likely made saving these parts impractical in the past. However, MAME can investigate the potential worldwide pharmaceutical manufacturers, and by putting in place a pooling scheme with the major high volume slaughter plants, could organize a central collection point at a UB freezer during the slaughtering season. This would be practical if each plant followed the strict quality standards outlined by the buyer and all processors packaged the product in the exact same way. Then a lot comprised of several plants' production could effectively be homogenous and be sold as one lot. MAME would contract the sale and then could redistribute the proceeds to the appropriate plants.

CURRENT SITUATION

This report is to propose a two-year program that creates a “strategic fit” between the different native and “donor” development assets available in the Mongolian situation. This plan will identify and outline the coordination of these capabilities, in order to:

- Reach the basic stated mission of increasing Mongolian meat exports, not by increasing commodity type exports but by developing “value-added” and exporting products from the value chain.
- Increase the standard of living of the rural Mongolian herders in a macro sense by key linkages to the export market in a micro sense.
- Raise the economic activity to increase employment and benefit urban members of the Mongolian economy.
- Not depend on the comparative advantage of livestock production, but to focus on development of a competitive advantage.

The genesis of this action plan is found in the report *Potential Policy Initiatives Increasing the Export of Livestock Products from Mongolia*, dated June 1999. The report suggested that an “activist” marketing approach is needed to correct the deteriorating meat export situation. Continued decline in 1999 can be observed by comparing the price action over the past year. Based on a survey, the original report published the 1998 prices for three major components of export livestock product (see p. 9).

Table 1 below shows the deterioration of the 1999 price, especially for the meat carcass processor (**26.3 percent decline**) and, in particular, the value-added boneless product processor (**72.3 percent decline**). This price degeneration is suggested to be caused by the limited opportunities of selling only to a monopsonist Siberian market. Herders have also been negatively affected (**7.7 percent decline**) but not as extremely as the meat processing sector.

Table 1—Mongolian Prices USD/Ton⁹

	Live 300Kg Animal	% Change	Beef Carcass	% Change	Beef Boneless	% Change
1998	280		1200		2068	
1999	260	-7.7	950	-26.3	1200	-72.3

Source: Number 1 Export Processor (Darkhan Meat Expo)

⁹ Based on yields given by interviewees, live weight to carcass is 45 percent and carcass to boneless is 64.7 percent. This suggests that carcass break-even would be 578 USD per ton and boneless break-even would be 1430 USD per ton. (These are approximations without consideration of added drop values and reduction of labor and packaging costs, which in the author's opinion would cancel out each other.)

The original report suggests that the Mongolian government set a policy that targets promotion of Mongolian Meat exports to the nations of Southeast Asia and the Middle East region, along with its traditional trading partners. This is to be accomplished by training Embassy personnel in the Mongolian Embassies of the target countries to perform in an embassy trade officer role (this follows a U.S. Department of Commerce model). They then promote Mongolian meat products at their country of assignment and broadcast back relevant data to some central “privatized” Mongolian entity for dissemination and action by the Mongolian meat export community.

On page 32 of the report identified above, an autonomous Mongolian export center institution is suggested to be this entity. The report outlined the functions and criteria that might be followed to create a private and/or quasi-government institution.

The organizational structure of the U.S. Meat Export Federation might be the basis of a suggested model to follow. The USMEF services eight sectors: packer/processors, purveyor/traders, agribusiness, farm organizations, beef producers, pork producers, lamb producers, and grain producers. USMEF offers services in the following areas:

- Market Access: Work with USDA and USTR to identify and remove barriers to U.S. red meat trade and open new international markets.
- Trade Servicing: Provide trade leads, market intelligence, importer lists, supplier lists, technical services, product research, and trade seminars.
- Promotion: Match funds for branding products promotion, involve members in international product shows, conduct HRI¹⁰ and retail promotions.
- In-Country Support: USMEF has offices in Tokyo, Osaka, Mexico City, Taipei, Hong Kong, Singapore, Seoul, and Shanghai, and representatives covering the Former USSR, Europe, *the Middle East, South and Central America, Canada, and the Caribbean.*

The proposed entity could mirror the USMEF structure (see ANNEX DD) and provide the Mongolian agricultural sector a means to *focus* on developing “free market” marketing approaches in the export market. It could:

- Increase collection and dissemination of domestic and foreign market information to improve the distribution of market power between Mongolian marketing participants.

¹⁰ Hotel, Restaurant, and Institutional

- Provide leadership in training production personnel, as well as herders in HACCP and/or ISO 9000 programs, and additionally work with Ministry of External Affairs to develop links with Embassy Trade Officers.
- Develop methodologies to lubricate barter trading¹¹.
- Provide leadership in the establishment of a centralized freezer storage facility.
- Convey a sense of urgency for the appropriate Ministry action needed on the animal health and sanitary issues related to the export market.
- Promote competitive (efficient) pricing for both forward and backward linkages.
- Advocate and support the general activity of the herder, dealer, and meat exporting entrepreneur to increase productivity (a business person incubator).

In response to the original report's suggestions, nine major private participants have organized an NGO association, *The Mongolian Association of Meat Exporters* (MAME). (See article published in UB Post, Marketing Meat from Mongolia.) The Ministry of Justice is issuing them a certificate, and founders and potential members are as follows:

- Makhimpex (Uaannbaatar)
- Darhan Meat Expo (Darhan)
- Bagakhangai Meat Plant (Sagahangal)
- Eviin Huch Co., Ltd. (Bor-Ondor)
- Dornyn Gobi., Lt. (Sainshand)
- TBD Anduud
- BC Mongolia (with German participation)
- Makn Trade (to be clarified)
- Consulting Unit
- Possible 10 members (mainly small sausage makers, to be named later)
- Some professionals have expressed interest in joining
- Several processing firms have applied and are under consideration
- Several Ministry representatives have been invited and have accepted to be active on the Board

¹¹ Trading in timber is very feasible, because the Chinese are the buyers. In the case of the past oil transaction, buyer was Mongolian Oil Import Company, which is nearly bankrupt. Therefore, last year this caused substantial delay in payments. The process encounters much difficulty because of the absence of information, coordination, concerted action, and finally, an entity to perform such a function. The report suggests the Mongolian Export Association Center could provide this service.

This group is a mixture of varied types of business structure. Member organizations are joint venture, joint stock, 51 percent state-owned, 100 percent state-owned, and individual sole proprietors. They join with the expectation of increasing Mongolian exports. It is planned that the three different sectors in the equation—the Meat Processors, the Animal Dealers, and the Herders—will be connected (economically linked) through this particular association to facilitate the efficiency of livestock product exporting.

The Association has approved its chapter and contract. Its first president is Dr. Deleg Sanjmyatav (president of BC Mongolia as well as a respected and known meat industry citizen), and the executive director/manager is Bayaraahuu Luvsandor (private consultant). It is suggested that there be three officers active in its operations—the president, the vice-president and the past president, each with a minimum one-year term. This particular scheme will insure continuity of operations.

Further, the Association has sent letters to the local rural governors and dealers of livestock asking them to nominate an individual to represent their interest in association actions. Informational brochures have been distributed to many members of the national government authority including legislators, as well as to local government officials and lawmakers.

The association plans to establish their official independent office in Ulan Bator by the beginning of February 2000. They plan to hire two staff members, one for domestic supply issues and one for international demand issues, along with the managing director to operate office functions. They will purchase a computer with appropriate configuration and peripheral equipment. The first several months' planned agenda will be discussed in detail in the synchronized strategy section of this report

The group has already organized an industry conference in late November 1999 to begin a dialogue of the pertinent issues. Recently, after lengthy discussions with the MAME leadership and the responsible Ministry of Agriculture officials, the government veterinary presence on the slaughtering line of export processors is resolved. This solves a stated major impediment to expanding export markets.

ASSURANCES FROM IDENTIFIED DEVELOPMENT ASSETS

Interviews with the following individuals and organizations have disclosed certain commitments to promote and assist the implementation of the MAME goals. See Figures A through E for enumeration of commitments.

Figure A—Dr. Eng. S. Deleg, President of MAME

- To form a consensus between elements of the export industry to speak with one voice wherever needed (bridge between industry and export market). To promote image with public relation activities.
- To gather and disseminate domestic and international supply and demand data for all members' benefit.
- To develop a program of traffic coordination between the meat exporting sector and transportation sector of Mongolia.
- To promote exports of Mongolian livestock products by use of trade shows and other means available of mass assembly of buyers.
- To become advocates for Ministry action needed to remove internal and/or external impediments to increased export transactions.
- To provide leadership in training of new production technologies, packaging innovations, and business operation methodologies.
- To develop value-added products for the export market, including coordination of pharmaceutical-type products.
- To develop a program to locate excess freezer capacity during production peaks to assist members temporary storage needs.
- To coordinate foreign inspection activities and lubricate the export paperwork mechanism.
- To install quality control measures over data in order to constrain misinformation.
- To develop and inform members of inedible processing options.
- To develop market systems (auction) to increase price efficiency between sectors.
- To greet foreign visitors on exploratory missions seeking meat products.
- To gain alliance with foreign trade associations to transfer useful information.
- To establish contact and dialogue with national regulatory agents and legislators, as well as local government officials (aimags and soums) and assemblymen.
- To establish programs with veterinary agencies to ameliorate quality of livestock and design a long-term joint program of genetic and nutritional improvement.
- To consider the suitability of some type of export credit guarantee program as used in western economies.
- To design some methodologies to lubricate barter transactions.

Figure B—Dr. Yadam Balgansuren, Chairman Sector Policy, Ministry of Agriculture and Industry

- To cooperate in any way possible to promote goals of MAME.
- To assign member of Ministry to act as representative and liaison between MAME and Ministry—Ms. Tserentbatyn Bar-Erdene, Strategic Planning Officer.
- To issue official Ministry Certificate of Attendance for training programs managed by MAME, to guarantee attendance.
- If needed, to use Ministry influence to make amendments and changes in laws (regulations) to lubricate export transactions.
- To assign food desk staff member to assist in documentation of export licensing issues—Mr. Batsuur, Strategic Planning Officer.
- To supply Ministry statistical data to MAME in an expeditious manner.

Figure C—Dr. Ochirhuugiin Ulambayar, Chief of State Veterinary Service, Government Agricultural Implementation Agency and Ch. Namjildorj, Head of State Control Committee for Veterinary Livestock Ministry of Agriculture, State Inspection Agency

Meeting held with president, vice president, and managing director of MAME present. Ministry officials above have committed to the following course of action:

- Changes in regulations will be made so that by end of Year 2000, ante-mortem and post-mortem inspection at the large exporting plants will be government employees and be operating under and supervised by Ministry of Agriculture regulations.
- Will implement necessary training programs to bring Mongolian inspectors up to Western ante- and post-mortem examination standards.
- Already have veterinary agreements with all 14 former states of Soviet Union, Federation of Russia, Poland, Czech Republic, Slovakia, Bulgaria, Hungary, and North Korea.
- Are currently in negotiations for veterinary agreement with China, South Korea, Japan and Viet Nam.
- Will actively start process for approval for veterinary agreements for the following countries: Taiwan, Philippines, Singapore, Hong Kong, Malaysia, Indonesia, United States, and the Mid-East countries.
- Based on direction from new government policy, will assist in any way possible to increase exporting of meat products.

Figure D—D. Boldbaatar, Former Director, Foreign Trade and Economic Cooperation Department, Ministry of External Affairs and Davaasambuu D., Deputy Director, Foreign Trade and Economic Cooperation Department, Ministry of External Affairs

- Both gentlemen confirmed support for the concept of using the Embassy “trade officer” notion to help market exporting of livestock products. However, they noted that the promotion of export by Embassy personnel has been a general function, but never to focus specifically on livestock products.
- Have scheduled a personal conference with MAME membership to discuss methodology of implementation of proposal.
- Have assigned a liaison person to further work with MAME and others to bring about the successful implication of this idea—D. ODONGUA, Special assistant. (Tel 311311, ext. 120)
- They are happy to augment their embassy training programs with any assistance that might be made available to them.
- They noted that other consultant reports note restrictions to increasing trade such as transportation and other structural deficiencies, which limit the possibilities.
- Response to this issue was that the Mongolian Meat Industry, through MAME would address and overcome each deficiency as it arises.
- The Ministry noted that they have a presence in the following countries of interest: Russia, Turkey, Hungary, China, Poland, Viet Nam, Cuba, India, Egypt, South Korea; and that they have limited presence in North Korea, Singapore, and Thailand.

Figure E—Ms. Jeanne Bartholomew, Project Director ACDI/VOCA, Mongolia

- Requires the signing of a Memorandum of Understanding between MAME and ACDI/VOCA to become cooperative partner of ACDI/VOCA.
- Can supply a full training plan for the educational needs of MAME members.
- A seminar relating the economic long-term benefits of installing voluntary HACCP program in meat processing facilities.
- A three-day seminar on initializing HACCP Procedures (can also be five-day).
- Seminar development and execution on any appropriate subject.
- Supply translation, copies, or publishing of educational materials distributed to MAME members.
- Supply USA volunteer technical expertise from the four per year already budgeted.
- Supply networking expertise and contacts with Ministry officials for MAME participants.

Figure F—Mr. Stephen Vance, Chief of Party, Gobi Regional Economic Growth Initiative

- Based on verification of the Association's NGO legal structure, he has suggested that the project could provide assistance in several areas.
- Professional Skills Development Program can either supply expertise, one-on-one basis, or for the MAME structure itself, Board of Directors interaction with members, managing staff relationship with members, etc.
- Would supply training program for Ministry of External Affairs in the training of Embassy Trade Officer role
- Provide expertise in the gathering of information and dissemination back to members. Can tap into current rural radio, journalist, and newspaper contacts in Mongolia for publication skill training.
- Under GOVIIN EKHLEL a program of small sum credit availability to MAME participants may be feasible. Rural herders now find, first three months of year, just before delivery of animals, a cash shortage problem (soft loan for rural herders needed). This program could fit that need well.
- Assist in development of MAME sponsored regional auction markets. Pilot project under development for cashmere in GOBI region can be transmissible for livestock.

SYNCHRONIZED STRATEGY

Agenda of Concrete Measures

Grounded on a “results-oriented” form of presentation, the following list of specific activities is offered for consideration.

1. Position a Public Relations Presence

The appeal of a Public Relation program is based on several basic factors when developing a high credibility for MAME activities. An “off-guard” approach, in which information can reach potential buyers who might not notice other types of communication, i.e., advertisements, and the “dramatization” notion, in that the breadth and depth of MAME activities in the Mongolian meat exporting situation will be best told and broadcast to Mongolian public by interviews, as well as reach worldwide potential customers through a type of public relations communications.

The strategic positioning of MAME in the Mongolian public eye, as well as the Mongolian Government perception, will be best reached through news media contacts. Additionally, awareness-building in the target economies where trade is anticipated can be accomplished.

The goals of this activity will be to schedule news conferences, focus groups, and panel discussions on Mongolian television and radio and in print news so that both rural and urban Mongolian public are aware of MAME activities. The best measurement of this activity would be the number and breadth of event scheduled and executed during the two-year strategic planning period.

2. Implement World-Wide Website Presence

E-commerce is fast becoming the marketing approach of choice in all parts of the world business environment. An Internet presence with a first class Website will be an asset for MAME to establish itself in the worldwide market

AGENDA OF CONCRETE MEASURES

1. Position a Public Relations Presence
2. Implement World-wide Website Presence
3. Solidify Financial Structure of MAME
4. Implementation of MAME Facilities/Staff/Equipment for Continuous Promotion of Mongolian Meat Exports
5. Pursue Implementation of Veterinary Enhancement of Ante- and Post-Mortem Slaughtering Inspections
6. Revitalize Preventive Health Care of Livestock Activities
7. Encourage HACCP Training Implementation Programs
8. Identify Target Countries' Requirements and Trade Impediments
9. Involve Ministry of External Affairs in Meat Marketing and Encourage “Fair Trading” Practices by Targeted Countries
10. Consensus Building Apparatus and Networking System for Appropriate Foreign NGOs
11. Investigate Appropriateness of Public and/or Private Marketing Board Structures for Mongolian Meat Industry
12. Collection and/or Dissemination of Data Apparatus, Improving Quality and Availability
13. Technical Assistance “Processing Training” Implementation Programs
14. Market Studies—Siberia, Inner Mongolia (China)
15. Organize Storage Capacity for Members
16. Centralized Foreign Veterinary Service
17. Transportation Networking
18. Value-added Product Development, Including Foodservice vs. Retail and Pharmaceutical Product Coordination
19. Transmit systematically with a Government Advocacy Program
20. Market Studies, Middle-East Countries
21. Develop Export Credit Guarantee Program
22. Provide Training for Mongolian Competitiveness Awareness Programs
23. Develop Program for Maximizing Offal Production Returns
24. Develop Barter Trading Expertise
25. Market Studies—Southeast Asian Countries
26. Develop Herd Improvement (Genetic and Nutritional) Program
27. Develop Herder Short-Term Loan Program
28. Develop New Marketing Organizations, i.e., Auction Marketing Schemes
29. Develop Feedlot Expertise for Extending Slaughter Periods
30. Training for Entrepreneur skills of Herder and Processor Staffs, i.e., Business Planning, Financing, Accounting, and Marketing
31. Development of Packaging Improvements for Domestic Markets

as a viable commerce agent for the Mongolian meat export business. A professional operating Website will be the measure of success.

3. **Solidify Financial Structure of MAME**

Mongolian meat exporters will have limited cash to inject into the operations of this private association. In examining the USMEF, we see that funds come from the members, the government, and through self-imposed check-off activities based on the selling of livestock and/or derived products. The problem facing MAME will be to reach a critical mass in funding activities while in the preliminary period of market studies and other costly market building activities. The number of successful forays and completed transactions into the neighboring trading areas will be a measure of success.

4. **Implementation of MAME Facilities/Staff/Equipment for Continuous Promotion of Mongolian Meat Exports**

Commitments from MAME officials indicate that funds are available for opening an office, hiring two staff and one managing director, and procuring computer and peripheral equipment. The problem arises in that this will drain the financial reserves and no funds for marketing activities such as travel to Siberia and Outer Mongolian can be identified. The number of marketing surveys outlining market potential will be a measurement of success.

5. **Pursue Implementation of Veterinary Enhancement of Ante- and Post-Mortem Slaughtering Inspections**

Discussions with appropriate veterinary service officials indicate a commitment to change the system to government-employed and -supervised inspectors at the export facilities by the end of 2000. The actualization of this goal is strictly in the hands of the Mongolian government. The MAME membership has expressed directly to the veterinary authorities that, for exporting to expand, this activity must be completed. The fulfillment of this activity will be a dimension of success.

6. **Revitalize “Preventive Medicine” Health Care of Livestock Activities**

This issue is not so easily addressed. Government authority over animal health care has been privatized. This means that herders must realize that the health care investment made will benefit them through higher value for the animals. However, the overall certification of “disease free zones,” a public good, will be difficult to address as there are many herders and all will be at different levels of awareness and concern. The goal is for education in this area to be successful through the coordinating efforts of MAME involvement to minimize the “free-rider” phenomena. Monitoring progress in this activity will be a MAME major goal during the two-year strategy.

7. **Encourage HACCP Training Implementation Programs**

All major exporters have committed to take HACCP training, to be management examples of sanitary practices in their operations, and, most importantly, to implement a written and government supervised HACCP program at their facilities. The time frame is by the end of 2000, coinciding

with the change in veterinary ante- and post-mortem activities on the slaughtering lines.

8. Identify Target Countries Requirements and Trade Impediments

Research is to begin immediately in the development of a catalog of the different import requirements of the targeted economies identified. This directory will be maintained by MAME as the major private source of information for Mongolian meat exporters. Any non-tariff barriers identified as unfair will be revealed to Mongolian government trade negotiators for corrective diplomatic action. As a start, ANNEX AA lists a series of Websites provided by U.S. government for gathering this information.

9. Involve Ministry of External Affairs in Meat Marketing and Encourage “Fair Trading” Practices by Targeted Countries

Commitment by the Ministry for implementation of “activist marketing” by trade officers located in Mongolian embassies in the targeted economies has been achieved. Actual training and implementation will be completed as soon as practicable. Success will be measured by the documentation of the number of trade contacts generated by this activity. MAME will document the contacts and their sources for verification purposes. Any unfair practices identified will be communicated to the Ministry for immediate response.

10. Consensus Building Apparatus and Networking System for Appropriate Foreign NGOs

Many worldwide private organizations have the same export improvement goals as MAME. To prevent “re-inventing the wheel”, MAME plans to be in contact with many other organization with similar objectives and to interchange ideas. Many organizations have publications that may be used by MAME as a model for implementation in the Mongolian case. Documentation of this activity and successful implementation of other foreign organization programs will be a measurement of success.

11. Investigate Appropriateness of Public and/or Private Marketing Board Structures for Mongolian Meat Industry

Around the world, many government legislated marketing boards exist. Additionally, many portions of the activity of these types of operations have been implemented, even in the United States. Many of these activities are not consistent with free-trade notions, but have been shown to be beneficial to the producers, if not the consumers. MAME should investigate these marketing board-type activities to find the ones that are consistent with Mongolian business values and could be implemented through government legislation. See ANNEX CC for an illustration of Ontario, Canada’s array and depth of “marketing board” activities

12. Collection and/or Dissemination of Data Apparatus, Improving Quality and Availability

Collection of price and volume data will be one of the major accomplishments of the MAME activity. Current activities are accomplished in an information

vacuum. Preliminary information gathering and dissemination now begins by the GOBI project in the cashmere industry. Building on these techniques, MAME can duplicate this benefit to the meat livestock activity. Actual transaction reporting will also improve price efficiency as long as the actual names of buyers and sellers remain confidential. A major impediment will be the gaining of confidentiality by the buyer and seller with the reporters at MAME. Measurement of success will be the actual publication of the data to members of MAME.

13. Technical Assistance “Processing Training” Implementation Programs

Many areas of interest exist for the improvement of technical expertise in the Mongolian livestock and meat industry. Development of value-added products from the value chain will be the first priority addressed. Many technical advisors are available to train Mongolian processors in more-up-to-date procedures in all aspects of production. Improvements in offal handling and further processing, when implemented, have the potential for rather substantial monetary gains in the return from livestock.

14. Market Studies Siberia, Inner Mongolia (China)

Actual trips to visit potential buyers will be accomplished by MAME officials, employing both quantitative and qualitative techniques. At this writing, the managing director is on a ten-day trip to China to identify and meet with potential buyers. Soon after, an additional trip is planned to several of the Siberian cities mentioned in the prior report. The major goal of this activity is to identify and contact major buyers of value-added products.

15. Organize Storage Capacity for Members

One major weak point in the marketing chain to Siberia is the limiting effect of freezer capacity of each exporting firm. Some firms have expanded unused capacity while others suffer extreme shortages. A ploy used by Siberian buyers is to hold back on purchases of frozen carcasses in order that freezer capacity for a particular Mongolian firm is filled. Then after they create this supply pressure point they drive down the price. Mongolian firms find themselves being forced to take lower prices in order to free up freezer capacity in order to be able to continue slaughtering during the season. MAME will develop a system where freezer capacity in Mongolia will be organized in a cooperative way to allow the use of individual firms' space and/or that MAME would arrange to rent space at some centralized location of private facilities in Mongolia. Measure of success would be the actual functioning of a central location or the coordination of capacity under the direction of MAME.

16. Centralized Foreign Veterinary Service

Associated with the limiting effect of the freezer capacity issue discussed above is the limiting effect of waiting for the appearance of Russian veterinary inspectors who travel to the Mongolian plants to clear shipments into Russia. This activity is also a major factor in clearing freezer capacity. However, if a

centralized private facility is actualized, MAME could coordinate the Russian veterinary clearance activities associated with the Russian sales and limit their constraint on production. Actualization of this coordinating activity would be an indication of its success. Additionally, this concept could be extended to include the veterinary services of other trade partner nations who establish trade relations with Mongolian exporters. The preparation of export documentation can be organized by MAME so as to offer to its members a coordinated and efficient service in preparing the authentication for export shipments of each member. In other words “lubricate” the export paperwork mechanism.

17. Transportation Networking

The transportation issue is one of the major constraints of increasing exports. The restrictive effect on finding buyers of 135-ton rail shipment is substantial. To significantly expand exports both to China and Southeast Asian economies and to Siberian cities to the north will be the use of 20-40 ton shipments. At first they would be refrigerated containers shipment by rail and eventually expand to over-the-road traffic. The constraints imposed by not having available a system for sufficient number of containers and a program for their return will pose a major problem. It is suggested that this coordinating task between the meat exporting industry and the Mongolian transportation industry be coordinated by MAME. Other sections of this report suggest a “broker relationship” be established by MAME; this coordination would expedite the resolving of many transportation issues.

18. Value-added Product Development, Including Foodservice vs. Retail and Pharmaceutical Product Coordination

Throughout this report, many suggestions for new products are introduced. It will not be necessary to outline them again. However, an issue to consider is if focus should be on development of retail-type items or foodservice-type items. Foodservice is the fastest growing portion of the marketplace. Concentration of foodservice item development (products used in restaurants, hotels, and institutions) could produce faster successes than trying to produce value-added items for the domestic retail market. Experts in development of foodservice items are available, but more importantly, the development of a distribution channel to foodservice might be more assessable in Mongolia than to retail markets. Illegal slaughterers can supply retail markets but lack sophistication to produce foodservice value-added products. The author can provide more details about information on development of both types of products at a later date. Pharmaceutical product development will require MAME coordination between firms. MAME can contract directly with import agents under strict specifications and then purchase a homogenous package from each export slaughterer. They then can coordinate and deliver large lots to the pharmaceutical importer and disburse proceeds to each supplier on a pro-rata basis.

19. Transmit Systematically with a Government Advocacy Program

Advocacy building skills will be a major tenet of the MAME organization. The managing director and president will be the main contact between the industry and government officials. Training provided by donor education in advocacy skill building will augment this competence. Measurement of the success will be the positive results from contacts and exchanges between MAME and ministry activities of interest.

20. Market Studies, Middle East Countries

As mentioned throughout this report, the Middle East nations represent a major exporting possibility. Oil price increases and WTO activities will make finding buyers of fresh unrefrigerated lamb and/or goat carcasses a reality. Air shipment of products can overcome the transportation issues, but most importantly, the reform of the veterinary establishment can be overcome immediately because these transactions require a religious cleric to be present and accomplish the type of inspection usually done by veterinary inspection services. Many other buyers of value-added meat products can also be found in this region. The embassy "Trade Officer" personnel in Egypt can be dispatched into the region to identify potential buyers. Then contact through MAME would be the next step in establishing working relations between buyers and Mongolian exporters. Success in this area can be measured by the number of completed transactions compared to the immediate past periods.

21. Develop Export Credit Guarantee Program

Many nations have developed government programs that help mitigate the question of risk in payment from foreign sales. The scope of these programs is quite varied around the world. It seems that if government favors the exporting of a certain product, they establish a payment guarantee scheme to give inducement to its exporters. However, this can take the form of assisting in the setting up of credit lines between the parties, the subsidy of part of the selling price, and/or the actual guarantee of the payment. These are budget-busting programs and should be given consideration in extreme cases. The United States has such programs, but not for meat exports. Canada, on the other hand, does have such a payment guarantee program for meat sales to Russia. MAME plans to investigate and suggest the possibility of such programs for Mongolian legislative consideration. However, guidance from the Trade Officer on site, between the importers' bank and the Mongolian exporter in making financial arrangements, bank letter of credit, etc., is a practical program to develop without legislative action needed.

22. Provide Training for Mongolian Competitiveness Awareness Programs

Dependence on the comparative advantage of livestock production as a basis for successful export expansion might prove elusive. Many economies around the world illustrate that having a comparative advantage in a commodity might not alone lift an economy out of poverty. The answer is that a nation needs a competitive advantage as well. Development of efficient production of value-

added exports and refraining from the easy and less complicated commodity exports hold the key to success. Production must be competitive with competing nations product. Efficiency criterion such as simply maximizing outputs and/or minimizing inputs and minimizing opportunity cost is the formula for Mongolian success in increasing exports in a way that will benefit both rural and urban citizenry. The success of this aspect of training would be difficult to identify as it will appear in macro-economic data rather than in easily identifiable micro-economic form. In the author's opinion, a simple understanding of $Q = f(L, K)$, a production model, would go a long way in setting Mongolian managers on an competitive path of operations.

23. Develop Program for Maximizing Offal Production Returns

The current state of offal processing in Mongolian plants is archaic. Products are collected and sold to Chinese buyers for cash. Bones and other items are dumped. An education program with technical advice would rise the level of return from this major element of slaughtering. Exporting of casing for sausage, variety meats, bonemeal, and pharmaceutical products could potentially double the return from livestock processing. (United States returns 1,650 USD/ton on this class of products.) Measure of success would be easily recognized by the installation of offal handling and inedible processing equipment at the major Mongolian slaughtering facilities.

24. Develop Barter Trading Expertise

The benefits and/or problems of barter trading have been extensively discussed throughout this report. The issue of addressing barter trading has generated much controversy. Many say that to address this issue would defray focus on the major issue of expanding exports, while others think this issue deserves some attention. MAME could act as the coordinating agent on this issue. Assistance in coordination of transactions has been identified and can be addressed by MAME. In the author's opinion, this should be done. Barter transactions could increase trade with Siberia and possibly penetrate past those major Russian buyers on the border who frustrate sales of value-added products to the other inner cities of Siberia.

25. Market Studies, Southeast Asian Countries

Details of how to start a marketing program have been outlined elsewhere. Use of "shoppers" and of the Trade Officer in Mongolian embassies is previously outlined. Southeast Asian nations vary greatly in income levels and sophistication, so obviously they need to be segregated and a marketing approach focused on each group. The nations of tropical climates and/or low incomes are good candidates for tinned meats (beef, mutton, and goat). The nations of high income would be candidates for manufacturing raw materials (frozen, cooked, boneless beef), fast-food supplier (beef patties, pepperoni) and/or retail snack foods (slim-sticks, jerky, dry sausage). Measurement of success would simply be a listing of completed transactions compared over time periods.

26. Develop Herd Improvement (Genetic and Nutritional) Program

Genetic and nutritional improvement of Mongolian herds is a long-term issue. Technical expertise is available immediately; however, the structure of the Mongolian herd-producing sector is not presently conducive to efficiently use the improved technologies available. No funds should be allocated to this end until MAME can better organize the herder organizations. Only cursory conversations on how to implement a long-term approach to this issue are suggested at this time.

27. Develop Herder Short-Term Loan Program

During the early days of January and February, herders are short of hard cash. The lunar New Year celebration requires cash outlays for flour and other staple food items. Currently, packer agents give cash advance for commitments to selling herd for the April season. This distressed sale usually leaves the herder with a depressed price for the animals. What herders need is a short-term loan so that pressure to commit to selling herd before market demand solidifies would eliminate this disadvantageous situation for the herder. The GOBI loan program under development discussed in this report for the cashmere industry can also be applied by MAME to organize a loan program to assist all herders. Success can be measured in the number of loans and repayment activity once such a program is implemented

28. Develop new Marketing Organizations, i.e., Auction Marketing Schemes

Linked to the herder selling problem discussed above, the GOBI project has developed pilot auction markets. These markets are designed to increase price efficiency throughout the marketing links. These programs designed for the cashmere industry can be directly applied to the same disadvantaged arrangements of the meat processor-herder transaction. The use of auction markets has been discussed in this report, as well as the author's prior report. Successful implementation of MAME, using the GOBI model to set up auction markets throughout the territory of Mongolia, would signal a major advance in the efficient price setting mechanism between market links

29. Develop Feed-Lot Expertise for Extending Slaughter Periods

The seasonality of slaughtering only 100+ days a year is causing an inefficient use of the slaughtering resources. This must be eliminated as a first step toward creating a competitive advantage. One Mongolian firm has eliminated this seasonality by producing feedgrain and feeding hogs and then using the facilities for hog slaughtering after cattle supplies have been exhausted. One way for others to increase slaughter is for the plant to set up a feed lot nearby. When the animals that are properly fattened from pasture are used up, animals that are fattened in the feed lot during the period will be ready for slaughter. This will make available animals so that extended slaughter may be accomplished. The technological expertise of feed lot management and nutrition are available from donor organizations. The actual feedgrain to be used is the problem. However, setting up production of feed grains and/or manufacture of inedible for feed needs can be addressed by

educational seminars. We can not duplicate Kansas in Mongolia, but the author's prior report outlines a feed program used outside of Moscow that might be duplicated in Mongolia. MAME could organize such education using the VOCA supply of expertise. Measurement of additional days of slaughter compared period over period would be the measure of success of such a program.

30. Training for Entrepreneur Skills of Herder and Processor Staffs, i.e., Business Planning, Financing, Accounting, and Marketing

Professional skill development training is an important part of all donor organization goals. The GOBI project has an excellent program in place. Entrepreneurial training is key to the final goal of having a competitive advantage in exporting. Training in all aspects of business management of individual firms and/or cooperative organizations is key to success of all our efforts to assist Mongolian business. MAME will set up appropriate seminars once the program is in place, and some of the other major obstacles have been addressed. The awarding of certificates of achievement in Business Plan Writing, Financial, Marketing, Accounting, and Human Resource Management to members of seminars will be a measurement of success.

31. Development Of Packaging Improvements For Domestic Markets

Development of retail products has been limited by the absence of an organized retail marketplace. Illegal slaughter of animals and "chop and sell" marketing of carcasses at central retail markets have been prevalent and make competition impossible. Only with government enforcement of inspection-required compliance can major slaughterers try to develop products for the retail domestic markets. All the packaging technology will not help this situation. Many plants have some advanced packaging equipment but no market is readily available for such products. Exporting of retail packaged goods would seem unlikely in the near future. The only exception, in the author's opinion, might be exported meat snack foods, which would require highly technical packaging techniques. However, once foodservice marketing is developed in Mongolian market, some technical packaging would be required. Only highly technical packaging is needed after some basic development has occurred in foodservice markets

Based on the preceding list of concrete measures that are suggested in order to meet the goal of increasing Mongolian livestock products, the following diagram of suggested activities with associated time frames is presented.

Activity Timeline Diagram

Resource Source	Activity	January 2000 – June 2000	July 2000 – December 2000	January 2001 – June 2001	July 2001 – December 01
ACDI/GOBI	Organize press conference announcing MAME	Local press, donor orgs. Ministry reps, industry members			
UNKNOWN	Strengthening of MAME financial structure				
MAME	Elaboration of newly established MAME office				
EPSP	Set in place organizational model				
EPSP/VOCA	Set in place consensus building apparatus				
MAME/GOBI	Information set: organize methodology for collection of domestic and international statistics				
VOCA	Collect subscriptions to trade publications				
VOCA	Seminar training—justification/implementation				
GOBI/MAME	Market survey				
UNKNOWN/LOCAL/EPSP	Customer onsite search	Siberia/China			
MAME/EPSP	Central storing capacity research	Research/coordination	Research	Research	Research
MAME	Central foreign veterinary services coordination				
MAME/GOBI	Transportation issues	Networking	20-40 ton containers	Truck brokerage plan	Issues
MAME/GOBI	Financial aspect of industry support	Investment, working capital, entrepreneurial training	Develop training for financial mgmt of enterprises		
MAME/VOCA/EPSP	Value-added trade	Develop	Train	Research	Implement
MAME/VOCA	Government advocacy program	Organize			
MAME/EPSP	Develop credit guarantee schemes		Organize herder loan program		
GOBI/MAME	Coordination for efficient processing of export casings		Develop strategy for maximizing offal and inedible returns	Develop program and training for efficient use of inedible returns	
GOBI/MAME	Develop training for Management of Enterprises				
EPSP/MAME	Study international markets				
EPSP/MAME	Trade barriers		Identify issues/develop strategy		
UNKNOWN	Possible trade missions by MAME to Siberia and China				
MAME/VOCA	Establish networks with different foreign NGOs				
GOBI/MGOV	Involve Ministry of External Affairs in marketing efforts				
MAME/GOBI	Barter trading feasibility study				
MAME/MGOV	Devise government programs on meat and its improvement				
MAME/VOCA	Establish animal husbandry improvements				
MGOV/EPSP	Comparable research on meat trading requirements in different trading regimes		(China, S. Korea, Japan, Viet Nam, Mid-East)	(Taiwan, Philippines, Singapore, Hong Kong, Malaysia, Indonesia, Mid-East)	
EPSP/MAME					
GOBI/MAME	Examine au		Price efficiency generator	Implement local auction mkts	Implement livestock local auction mkts
VOCA/MAME	Develop feed-lot scenarios to extend slaughter time				
EPSP/MAME	Implementation methodology for collection and dissemination of domestic and international statistics				

Activities with Identified Resources

Following are the activities suggested matched with the identified resources. See footnote on Table AA for key to resource identification.

Table AA—Establishment¹² Package
January 2000 to June 2000

Activity	Resource Source
1. Organize press conference announcing MAME (<i>Local press, donor organizations, Ministry representatives, plus industry members</i>)	ACDI/GOBI
2. Strengthening of MAME financial structure(<i>Need cash for assets or operational studies-don't have for both</i>)	Unknown
3. Elaboration of newly established MAME office (Staff/ Equipment) (export documentation service and freight coordination agency)	MAME
4. Set in place organizational model (similar to USMEF)	EPSP
5. Set in place consensus building apparatus (modus-operandi)	EPSP/VOCA
6. Information set: Organize methodology for collection of domestic and international statistics	MAME/GOBI
7. Collection subscriptions to international trade publications (newspapers, magazines, journals, etc.)	VOCA
8. Seminar training members—Justification/ Implementation	(HACCP) VOCA
9. Market survey (need local Russian/Chinese speaking researcher): Animal Supply (region, feed, feeding, quality of meat)	GOBI/MAME
10. Customer onsite search: Cities of Siberia and China	Unknown/Local /EPSP
11. Central storing capacity research	MAME/EPSP
12. Central foreign veterinary services coordination	MAME
13. Transportation networking Issues	MAME/GOBI
14. Financial aspect of industry support: Meat Industry in Mongolia, investment, working capital, entrepreneurial training	MAME/GOBI
15. Develop local value-added trade possibilities	MAME/VOCA
16. Organize government advocacy program	MAME/VOCA
17. Develop credit guarantee schemes used in other economies	MAME/EPSP
18. Develop coordination for efficient processing of export casings	VOCA/MAME
19. Develop training for Management of Enterprise	GOBI/MAME

¹² Acronyms used to indicate resources used in action plan are as follows: **MGOV** is Mongolian Government; **MAME** is Mongolian industry sources; **ACDI/VOCA** is from US Volunteer Agency; **GOBI** is from US Gobi Initiative Project; and **EPSP** is Development Alternative Inc. (proposed virtual based consultancy of William Albanos—5-days/month for 24 months with 3 10-day, on-site visits), **Unknown** is no source of funding identified yet.

**Table BB—Marketing Package
July 2000 to December 2000**

Activity	Resource Source
1. Study International Markets (possible targets)	EPSP/MAME
2. Identify trade barriers (<i>implicit and explicit</i>)	EPSP/MAME
3. Possible trade missions by MAME to Siberia and China	Unknown
4. Establish networks with different Foreign NGO's of meat industry	MAME/VOCA
5. Involve Ministry of External Affairs in marketing efforts (support)	GOBI/MGOV
6. Training local and international marketing of value-added goods (<i>Foodservice vs. retail products</i>)	MAME/VOCA
7. Barter trading feasibility study	MAME/GOBI
8. Devise Government programs on meat and its improvement	MAME MGOV
9. Establish animal husbandry improvement (<i>genetic</i>)	MAME/VOCA
9. Comparable research on meat trading requirements in different trading regimes targeted .i.e., China South Korea, Japan, Viet Nam, Mid-East	MGOV/EPSP
10. Examination auction local markets (<i>price efficiency generator</i>)	GOBI/MAME
11. Organize herder (<i>small sum</i>) loan program (GOVIINEKHLEL)	GOBI/MAME
12. Develop fed-lot scenarios to extend slaughter time	VOCA/MAME
13. Central storing capacity research/coordination	MAME/EPSP
14. Central Foreign Veterinary Services Coordination	MAME
15. Transportation Issues (<i>20-40 ton containers</i>)	MAME/GOBI
16. Develop training for Financial Management of enterprises	GOBI/MAME
17. Develop strategy for influencing trade barrier issues	EPSP/MAME
18. Develop strategy for maximizing offal and inedible returns	VOCA/MAME

**Table CC—Veterinary Package
January 2001 to June 2001**

Activity	Resource Source
1. Comparable research on meat trading requirements in different Trading regimes targeted, i.e., Taiwan, Philippines, Singapore, Hong Kong, Malaysia, Indonesia, Mid-East	EPSP/MAME
2. Research new value-added exportable products (<i>tinned meats</i>)	EPSP/MAME
3. Implementation local auction markets	GOBI/MAME
4. Develop fed-lot scenarios to extend slaughter time	VOCA/MAME
5. Central storing capacity research	MAME/EPSP
6. Central Foreign Veterinary Services Coordination	MAME
7. Transportation Issues (<i>Truck brokerage plan</i>)	MAME/GOBI
8. Develop program and training for efficient use of inedible returns	VOCA/MAME

**Table DD—Data Package
July 2001 To December 2001**

Activity	Resource Source
1. Implement methodology for collection and dissemination of domestic and international statistics	EPSP/MAME
2. Implement new value-added exporting products	EPSP/MAME
3. Implement livestock regional auction local markets	GOBI/MAME
4. Develop fed-lot scenarios to extend slaughter time	VOCA/MAME
5. Central storing capacity research	MAME/EPSP
6. Central Foreign Veterinary Services Coordination	MAME
7. Transportation Issues	MAME/GOBI
8. Plan training for updated packaging options	VOCA/MAME
9. Implementation of Website communications	VOCA/MAME
10. Develop training for managing enterprises	MAME/GOBI

ACHIEVEMENT VERIFICATION CRITERIA (AVC)

This study to find ways to encourage the increase of exports of Mongolian livestock products has rationally been divided into several phases: the accumulation of information phase; the determination of requirements phase; the design implementation phase; and finally, the actual implementation of action phase. The next logical assumption is that achievement verification criteria, hereinafter referred to as AVCs, need be developed so that the implementation activities have some measurable deliverables associated to gauge achievement.

This section will suggest a level of expectation associated with the action submitted in the “Activity Time Line” diagram, which is designed to spell out the activities over the two-year implementation phase. The actual deliverables expected—from the actions outlined in Tables AA, BB, CC, and DD at the end of each six-month period—will be the focus of this section. For example, we suggest the activity of travelling to China and/or Siberia to contact potential buyers. The actual activity of making trips is not the goal; the journey must be closely related to the increasing of export transactions. Therefore, a reasonable deliverable should be the number of actual completed transactions compared to some past period and not the number of trips taken.

A six-month report should be prepared by EPSP outlining the actual level of deliverables associated with the different activities suggested in that time frame (Table AA, BB, CC and DD). This document should establish if the aid-in-kind and/or funds expended have been effectively deployed and the next six month program continued

The activities outlined in Table AA January to June 2000 will be the most difficult to assign qualitative deliverables However, the activity and the associated AVCs are outlined below.

<u>ACTIVITY</u>	<u>AVC</u>
Public Relations	At least one major media event and two TV and/or radio interviews by MAME personnel. At least three articles published about MAME activities in local newspapers or magazines.
MAME Organization	Using USMEF as the model organizational arrangement. Prepare an examination of the similarities and the dissimilarities of both organizations. Prepare rationalization of differences.
MAME Operations	Actual functioning office and staff personnel at independent location. Functional detail of international and domestic data collection apparatus and dissemination will indicate level of measurable success.

Consensus Building	Effectively speaking with one voice to the Government, the media, and the potential targeted customers will indicate unanimity skill of MAME's staff and elected operating executives.
Transportation "Agent" Plan	Detail of progress in coordination between MAME members and Mongolian transportation firms in the number of refrigerated containers available for transshipment to Chinese ports and/or inner Siberian cities. Harmonization of rates and increasing availability, period over period, will indicate measurement.
Export Requirements Of Targeted Economies	Using Website aids (ANNEX AA) a complete catalogue for each targeted country will be established at MAME. A complete updated listing of health and tariff conditions will be maintained. AVC will be the actualization of such catalog document. Unfair conditions to be identified and forwarded to Ministry of External Affairs trade officials. Documentation of referrals and resultant actions will also measure activity.
Seminar Training	MAME sponsored classes: Technical for operation of plants, as well as, HACCP food safety inspection implementation in major exporter plants. Number of sections and number of attendees, period over period, will be measurement. Final goal of major plants under HACCP will be major accomplishment. Other technical issues important but not critical.
Market Surveys	Results of "shopper" visits and/or actual MAME trips to targeted economies retail outlets and/or central markets in collection of data: on products on selves, size of containers, type, breath and ingredients of products. Actual quantitative summaries of reports will be measure. First six-month expect at least reports from China, Siberia, North and South Korea, Viet Nam, and Middle East nations.
Central Storage	Actualization of a leased central facility would be first measure of MAME achievement. However, documented coordination between members during processing season would also demonstrate success on this issue.

**Central Export
Documentation
Service**

Trained staff in completion of export documentation and foreign veterinary coordination would indicate success. Number of firms and number of shipments assisted, period over period, would indicate progress and achievement..

**Develop “Value-
added” Product and
Guide**

Programs to identify value-added export products will be major concern for MAME. Actualization of Mongolian product specifications will be measure of success. Publishing a “Buyers Guide” with assigned numbers with each standardized product will be 2-year goal of MAME. Measurement will be status of progress towards this stated goal of publishing an actual guide for import customers’ use. Identifying potential suppliers of certain products, i.e., snack foods using a national contest will be one-year goal.

**Development of
Efficient Processing
of Offal**

Raising level of returns from Offal items including preparation of sausage casings for exporting will be a high priority of MAME. Donor expertise and equipment suppliers will be source of data using seminar format for distribution of information. Documentation from export plants outlining changed procedures and new equipment installations will be the deliverable for measurement. MAME/EPSP will document and report status each six-month period.

**Investigate “Credit
Guarantee” Schemes**

MAME will search and document government schemes for payment guarantee from export customers used in other nations. A complete delineation and documenting will be goal. Consultation with legislators will occur after MAME membership reviews and suggests that such schemes are viable in Mongolian situation. Deliverable at end of 2-year is report of choices, not implementation.

**Barter Trading
Coordination**

Program to lubricate bartered commodities into cash payments to MAME membership is goal. Assistance has been identified and awaits actual transactions. Measurement will be number and volume of transactions facilitated period over period.

**Professional Skills
Development
Programs**

Entrepreneurial training for individual and organizations provided through seminar format. Certificates of training to be issued to graduates. Measurement of success will be number of sessions and attendees period over period.

The activities outlined in Table BB July to December 2000 will also be complex to assign qualitative deliverables. However, the activities and associated AVCs are outlined below.

<u>ACTIVITY</u>	<u>AVC</u>
Public Relations	At least one major media event and two TV and/or radio interviews by MAME personnel. At least three articles published about MAME activities in local newspapers or magazines.
MAME Organization	Using USMEF as the model organizational arrangement. Prepare an examination of the decision-making apparatus of multi sector and competing firm -- board of directors. Illustrate how sectors and firms with competing goals can cooperate on export issues. Examine and report rationalization of contrariety.
MAME Operations	Establish networks with foreign meat industry NGO's. Compare their service level to members with MAME. Establish data transfer between organizations and MAME. Deliverable will be comparisons of level of data collection and dissemination and other services provided, by MAME, period over period.
Consensus Building	Development of action programs with veterinary service to complete inspection transfer of ante and post mortem inspection function. Preliminary discussions of quality improvements of animal health issues. Documentation of progress will be deliverable.
Transportation "Agent" Plan	Formalization of "broker" relationship between MAME representing member firms and Mongolian transportation firms. Harmonization of rates and increasing availability, period over period will indicate measurement. Actual shipment transactions should occur and begin a base of measurement for subsequent period comparisons.
Export Requirements of Targeted Economies	Unfair trade barrier conditions identified and then forwarded to Ministry of External Affairs trade officials. Trade health issues identified and referred to Ministry Veterinary Services for correction. Documentation of referrals and resultant actions will measure activity.

Seminar Training

MAME sponsored classes: for HACCP food safety inspection implementation of all export plants by end of period (December 2000). Number of sections and number of attendees, and successfully converted plant food safety systems period over period, will be measurement. Other technical issues for maximizing offal and inedible returns should be progressing. Actual changes at the plants should be documented and used as a measurement of progress of technological improvement of Mongolian meat processing.

Market Surveys

Results of “shopper” visits and/or actual MAME trips to the targeted economies retail outlets and/or central markets in collection of data: on tinned products on selves, size of containers, type, breadth and ingredients of products also indication of dry sausage products imported, including meat snack foods. Second six-month expect at least some reported transactions within China, Siberia, North Korea, Viet Nam, Eastern Europe and Middle East nations. Market survey reports from South Korea, Japan, and United States. Actual quantitative summaries of reports will be measure

Central Storage

Actualization of a leased central facility would be first measure of MAME achievement. However, documented coordination between members during processing season would also demonstrate success on this issue.

**Central Export
Documentation
Service**

Trained staff in completion of export documentation and foreign veterinary coordination would indicate success. Number of firms and number of shipments assisted, period over period, would indicate progress and achievement.

Develop “Value-added” Product and Guide

Programs to identify value-added export products is major duty for MAME. Actualization of Mongolian product specifications will be measure of success. Preparation for publishing a “Buyers Guide” with assigned numbers with each standardized product will be 1-year goal of MAME. Measurement will be status of progress towards this stated goal of publishing an actual guide for import customers’ use. Identifying potential suppliers of certain products, i.e., snack foods using a national contest will be end of period goal. Completed survey of tinned product demand will also be completed and documented by end of period. Identification of Domestic foodservice market to be completed by end of this period.

Development of Efficient Processing of Inedible And Offal

Report from export plants outlining changed procedures and new equipment installations will be the deliverable for measurement. Installation of inedible processing for bone meal and inedible oil is goal by end of December 2001. MAME will document and report status each 6-month period.

Investigate Feed-Lot Program

MAME will research and document feedlot possibilities (long-term issue). Using “Eviin Huch” hog feeding as model. MAME will investigate possibilities for feeding cattle during traditional slaughtering season. Therefore, more animals would be available at end of traditional season; extending use of facilities and minimizing wasted resources. A complete delineation and documenting will be goal. Intermediate report at end of each period will be measurement period over period. However, deliverable at end of 2-year is a report of possibilities, not implementation.

Barter Trading Coordination

Measurement will be number and volume of transactions facilitated period over period.

Professional Skills Development Programs

Entrepreneurial Training for individual and organizations provided through seminar format. Certificates of training to be issued to graduates. Measurement of success will be number of sessions and attendees period over period.

**Auction Market
Improvement**

Modeled after the GOBI project cashmere pilot market MAME will attempt to design livestock auctions for cattle in remote locations. By end of period, develop outline of such a program. Implementation is not expected until end of December 2001. Intermediate documentation of progress, period over period, will be measurable deliverable.

**Animal Husbandry
Improvement**

Improvement of the genetic and nutritional husbandry of Mongolian livestock is a long-term issue. Preliminary discussion and consultation with donor technicians is needed. Documentation of these consultations and recommended actions will be measurable deliverable during the period ending December 2000.

**Loan Program
GOVIINEKHLEL**

Short-term small loans for herders have been found to be beneficial in stabilizing the market price for livestock during the early part of the year. A program for loans is being implemented in the GOBI project. This model is to be extended to MAME herder members. Documentation of this progress is measurable deliverable. Goal is to have program in force for 2001 season.

The activities outlined in Tables CC and DD cover the activities of MAME during the second year of the plan. The actual outlining of a deliverable will be very complex and redundant until a clearer understanding of the actual results during the first year have been experienced. The deliverables during the second year will be extensions of the first years deliverable and need not be repeated at this point herein.

CONCLUSIONS

1. Promoting the image of the exporting sector through public relations will be an important adhesive activity in consolidating public and government opinion. Both rural and urban sector public opinion and governments' perception of that opinion will affect the amount of bureaucracy cooperation available to solve industry problems.
2. Two major impediments to increasing exports to the new, more sophisticated markets have been 1) the Mongolian livestock health issue, and 2) the Mongolian food safety of meat processing issue. The food safety processing issue has two different elements—the inspection of animals at slaughter and the inspection of plant processing procedures after dressing the carcasses. Resolving these issues has been a contentious endeavor. Nevertheless, agreement on the food safety of meat processing issue with the Mongolian Veterinary Service has been reached. The first half of the equation is that the current system of plant-employed veterinary ante- and post-mortem certification is to be changed to government-employed and -supervised veterinary ante- and post-mortem certification based on Western standards. The second half is that each plant is committed to implement HACCP procedures, also based on Western standards. In other words, the education of sanitary standard operating procedures (SOP) must be taught and practiced by managers. This system is to be operated by plant-employed inspectors and monitored and verified by random checking of government-employed inspection personnel. When this is in operation, at the beginning of 2001, this would be considered equivalent to Western standards.
3. The livestock health issue has been addressed but not resolved. The Mongolian Veterinary Director will prepare a letter to USDA listing the potential products to be exported to the U.S. This will set in motion a government-to-government consultation process to address this issue. It is felt that all the targeted economies mentioned in this report will not have such strict requirements as the U.S. and/or it might be possible to get partial zone certified as “disease free” areas.

CONCLUSIONS

1. Need public relations to consolidate public and government opinion
2. Major impediments to increasing exports: 1) livestock health and 2) food processing safety issues
3. Possible to get regional “disease-free zone” certification
4. Export sector critically dependent on physical distribution improvements
5. Higher returns from offal and inedible needed
6. Marketing board implementation can contribute to producer market power deficiencies
7. Meat importing requirements initiated by every nation, by design are complex and confusing, and sometimes contradictory
8. Boneless producers not experienced in producing and selling boneless product with varied fat content
9. Installation of cooking and IQF freezers could revolutionize export of boneless meat
10. Tinning capacity is limited to only one facility, Makhimpex
11. Dry sausage offers excellent export possibilities for production of pepperoni for pizza and meat snack foods such as jerky and slimsticks
12. Slaughtering small-carcass lamb and goats for sale as fresh unrefrigerated product in the streets of Mid-East marketplaces is feasible and probable
13. Barter trade has many difficulties because of the absence of information, coordination, concerted action, and some entity to perform these functions
14. In the author's opinion, competitive advantage skills seem inadequate
15. Obvious need for coordinated effort to effectively use the industry freezer resource and correlate Russian and other foreign veterinary clearance documentation
16. Pricing efficiently between the herders and meat processors seems inadequate. Practice of restrictive regionalization of packer and herder relationships not conducive to open market pricing efficiencies

4. The Mongolian meat export sector will be critically dependent on physical distribution. Transportation also plays an important role in market development. The speed and flexibility of the transportation aspect of business can play an important role in competitiveness of the industry. Up to this point, transportation to the north (Siberia) has been sufficient for large sales of frozen carcasses. Rail has been generally the choice, but truck delivery is also used. However, now we want to ship south (China) to diversify the export market. Transportation will be a major concern as very little refrigerated goods have been shipped in the past. As transportation is one of the large components of the food price, it must get special attention. Some coordinated approach to this issue should be a part of the MAME agenda. The Mongolian government report cited elsewhere in this paper particularly references that the association should have an “autopark” capability.
5. Methodology for getting returns from the offal and inedible portions of slaughtering are very antiquated. This causes a loss of returns not only to the meat processor, but also to the rural herder in the form of lower prices. Many possible improvements might be organized by MAME to transfer the knowledge of proper handling of offal and inedible to its processing membership. This has the potential of doubling returns from slaughter.
6. Agricultural marketing boards are complementary producer market power tools. Their implementation can contribute to reducing the producer market power problems through orderly marketing and greater involvement of producers in the marketing and pricing process. The success of this tool depends on the organizational strength of producers, the control over supply that they provide, and the skill with which Mongolian producers use the marketing boards’ monopoly power. However, many of the characteristics of the marketing board operation have been embraced in the proposed MAME agenda. This will not be equivalent as MAME does not have the power of legislation behind it. However, this would expedite a “free-market” approach to the issues under discussion.
7. Identifying the importing requirements of the targeted economies will be a critical element in the success of MAME effectiveness. Each nation may have a hidden agenda in their requirements. No doubt there are legitimate health concerns for their citizenry, but many nations take pride in their skill to hide protectionist elements disguised as health requirements. These meat-importing requirements, initiated by every nation, by design are a complex, confusing, and sometimes contradictory set of limitations. It will be a challenge to identify, understand, and catalog these requirements.
8. Mongolian boneless producers have not gained much experience in producing and selling boneless product with varied fat content for use in manufacturing of sausage and/or minced products. Their experience is limited to deboning carcasses and boxing the resultant product without regard to what major cuts might be held out.
9. The installation of cooking and IQF freezers might revolutionize Mongolian meat processing. Boneless meat can be ground (minced) and cooked, then

flash frozen and packed in containers. This type of product is used worldwide for many foodservice manufacturing processes, i.e., spaghetti sauces, taco meat, pizza crumbles, etc. Additionally, being precooked, product might circumvent some of the disease-free certification issues.

10. Tinning capability in the Mongolian marketplace is limited to only one facility (Makhimpex). During my last visit, I was informed of some entrepreneurial new trading firm that intended to set up such manufacturing capacity. However, I cannot locate those involved. Still, the current capacity might be able to start the process once a decision to export tinned meats is actualized.
11. Dry sausage offers an excellent export possibility. Because of the stable quality of the products, they can stand long shipping distances and adverse climatic condition better than any other unfrozen category. Two particular categories of product are especially interesting. Pepperoni is a major component of pizza making. Pizza is one of the fastest growing fast foods in most of Asia. This means that if we implement some of the changes indicated by the veterinary service for plant sanitary improvements, it would be possible to supply this product for export for fast-food operators in Asia. Another product of interest is a retail branded product snack food item like meat “slim-sticks” or jerky products. These products also have a stable shelf life and can stand climatic changes without a major loss of quality. There is no limitation to the varieties and depth of the products produced as dry sausage.
12. Slaughtering small carcass lamb and goat for sale as fresh unrefrigerated product on the streets of Mid-Eastern marketplaces is feasible and probable. This would be an excellent export revenue generator. Competition in the market comes from East Africa. The quality and environmentally sound Mongolian product should win out if marketed properly.
13. The early market economies depended on barter—the trading of goods directly for other goods. But barter can be a costly process in terms of time spent searching out satisfactory exchanges. The evolution of money made trade easier and more efficient. However, Mongolian meat exporters to Siberia find that money is scarce to the Russian buyers due to the economic upheaval in their economy. Hence, increasingly, they offer commodities like gas, oil, and timber in order to get meat. A few Mongolian traders are agile and have successfully made transactions. Generally, most of the traders are not prepared to search for buyers of commodities and therefore cannot sell their meat. Barter trade has had some delay in payments and many difficulties occur because of the absence of information, coordination, concerted action, and finally, some entity to perform these functions.
14. In order to focus on gaining a competitive advantage, each firm’s management must engage in input minimization and/or output maximization techniques. These skills seem inadequate based on the author’s observations. One major encumbrance is the unused and misused resources related to the seasonality of slaughtering. The management propensity to waste inputs, i.e., labor, etc., is directly related to this custom.

15. The need for a coordinated effort to effectively use the industry freezer resource is obvious. MAME can provide the coordination mechanism, either by identifying and scheduling use of each member's capacity or by leasing additional space at centrally located private facilities. Additionally, this same correlation ability can be applied for Russian and other foreign veterinary clearance documentation.
16. Pricing efficiency between the herders and meat processors seems inadequate. The current practice of restrictive regionalization of packer and herder relationships is not conducive to open market pricing efficiencies. However, based on the current structure of this activity, it may be the only practical methodology available to the participants.

RECOMMENDATIONS

1. One of the first public activities of MAME would be to call a press conference and invite all members, all relevant Ministry representatives, livestock sector leaders, donor organization representatives, and allied industry leaders, i.e., transportation leaders. This conference should convey a sense of commitment from the MAME membership to work together and increase exports that would result in economic benefit all sectors of Mongolian life. Moreover, appearance on talks shows and other mass media will strengthen the association credibility.
2. Recommend that the major exporting firms make a commitment to take training for HACCP procedure implementation at their processing facilities. After the training, they must implement and train their staff in these requirements. Employees will follow the example of the leadership, so food safety issues must be propagated by management (COMMITMENT OF MANAGERS) at all levels and at all times during processing.
3. In the West, it is not unusual for entities to develop that act as agents for shippers of goods. Potential shippers use these agents (also known as freight brokers) to coordinate the shipment by locating the appropriate, most competitive freight carrier. Two things occur: the shipper is relieved of the task of contacting many freight companies to find the most desirable, and the freight companies do not have to take calls and compute quotations for numerous potential shippers. This agent actually lubricates the process and is paid a commission from the freight company. Recommend that MAME could develop such an agent presence in Mongolia and would service the membership's shipping activity and focus the potential customers to the freight carrier. Freight carriers would respond more positively if they knew they were dealing with the industry as a whole and not just a single firm. Both parties would be better off, and MAME could earn legitimate fees to support this activity. This type of coordinated action might be necessary to induce freight carrier management to supply refrigerated container to ship south.
4. Recommend that MAME organize an educational program with the assistance of ACDI/VOCA technical expertise to inform member processors of any innovative alternative methodologies that could raise their return per animal without a major capital expenditure. The proper efficient processing of

RECOMMENDATIONS

1. Hold press conference, invite all relevant participants in the livestock export arena.
2. All major export firms submit to HACCP training
3. Develop shipper-agent relationship between freight companies and MAME members
4. Develop centralized education seminars on alternative processing methodologies, i.e., handling of viscera
5. Develop and maintain in MAME office, a catalog of each target county's import requirements
6. Evaluation of producing and exporting cooked ground beef and/or cooked, seasoned beef crumbles.
7. Investigate possibility of contracting and organizing homogenous lots of highly-valued glands and organs
8. Initiate market studies to analyze tinned meat market using "shopper" notion
9. Develop a national contest to identify entrepreneurs interested in the manufacture of dry sausage, i.e., pepperoni and jerky/slimsticks
10. Recommend marketing assets to be targeted to identify Mid-East buyers of air-shipped, unrefrigerated, fresh carcasses
11. Finalize development of a program for lubricating barter transactions
12. Identify ways to eliminate seasonality of meat processing
13. Stud possibility of leasing private freezer space during periods of overflowing production and delayed export shipments
14. Study methodology of auction markets

bones will enhance the production of boneless meat for export. Currently bones are dumped for scrap value, except the limited amount sold in the domestic market as soup making material. Based on information gathered during my interviews, a centralized education on the handling of viscera to maximize returns is also suggested.

5. Recommend that the staff member of MAME who takes care of the international issues be trained to become an expert in the import requirements of each target nation. Enclosed in ANNEX AA is a list of Websites that can be accessed for identification of these requirements. It would also be advisable for a close relationship with the veterinary service that negotiates agreements with nations be established to supply data. A precise manual must be created by MAME so that this becomes the Mongolian intelligence center for this information.
6. Recommend the evaluation of producing and exporting cooked ground (minced beef and cooked seasoned beef crumbles. Information from major international traders reveals a large demand in developed economies for this type product. Cooked ground beef can be used in any way fresh frozen ground beef is used. Seasoned and sized beef crumble can be used to bulk manufacture many ethnic dishes. Some suggestions are Teriyaki, Taco, Italian, Chili, Garlic, Salted, and Hot & Spicy, to name a few. These taste profiles can also be used to make Italian sauces, a beef and macaroni dish, stir-fry dishes, and as a base for soups and a fill for lasagna, chili and tacos.
7. Recommend that MAME investigate the possibility of contracting with pharmaceutical industry buyers to sell pooled, from a central collection point (various slaughterers), homogenous lots (contract packing) of highly-valued, non-muscle (glands and organs).
8. Recommend that a simple market study be initiated to analyze the tinned meat market of the targeted nations. "Shoppers" could be embassy personnel or any other contacts located in the countries under analysis, who supply back the data (type of tinned meats and size of packaging on selves in local outlets, etc.). This data should be collected and cataloged by MAME. Then a comprehensive analysis should be published to attract members or potential members to develop such manufacturing capabilities of tinned meat for exporting.
9. Recommend that a search be commenced for a manufacturer of dry sausage for possible export. Dr. John Romans' report cited elsewhere in this report identified potential entrepreneurs that are interested in the manufacture of these type items. MAME, in cooperation the Chamber of Commerce, might sponsor a national contest that awards a "prize" for the best dry sausage product, snack stick, and/or jerky and pepperoni. This would induce the entrepreneurial spirit in the Mongolian processing industry and set the stage for an array of products that MAME might identify as exportable candidates. For the snack foods, the same technique of sending in shoppers to retail outlets in the countries of interest would provide product demand information such as tastes and preferences of the local consumers for slim-sticks and

jerky. For foodservice, once a pepperoni product is produced, contacting and offering sample product to the major pizza fast-food operators in Asia is academic.

10. Recommend marketing assets be used immediately to investigate and identify Mid-East buyers of fresh carcasses. Since there is a religious component, this means that the buyers will send their own religious cleric to do the post-mortem and sanitary inspections themselves. This means that current condition of Mongolian sanitary status is immaterial for transactions to occur.
11. Recommend that to lubricate barter transactions, MAME organize a program for easier disposal of bartered commodities from Russia. Conversations with the largest timber processor and trader to China in UB reveal his willingness to aid meat processors involved in these barter transactions.
12. Recommend immediate attention be given to identify ways to eliminate the seasonal use of the meat processing resources. Investigation and implementation of the use of feedlots to expand animal supply could be a major first step in this process.
13. Recommend that MAME immediately study the possibility of renting private freezer space for use by members during periods of overflowing production and delayed export shipments.
14. Recommend that MAME study the methodology of auction markets under pilot operation in the cashmere industry and consider duplicating the process for meat processor-herder price relations. In the meantime, a manual system can be developed at the MAME office, in that herder leaders can call in and list the offerings available and packers can call in listing the bids available. Matches could then be identified, or MAME could simply refer logical potential transactions back to the parties themselves.

APPENDIX A—Interview with Dashkhun Gerelkhuu, General Director, Meat Processing Factory of Bagakhangal (BMF)

Gentlemen was very congenial. He stated that he was pleased with what he had read in the June 1999 report and that it actually represented the true status of Mongolian export market. He said that normally the foreigners who write these reports do not understand the true Mongolian situation, and he then congratulated me on my insight.

He truly agrees that it is time for Mongolian meat exporters to diversify their marketing mix. The direct dependency on the Russian market and its economic volatility is becoming a large liability for Mongolian exporters. He is concerned that the next generation of Mongolian meat packer staff needs to be trained in many new skills in order to expand the horizon of foreign trade and feels a responsibility to the next generation to provide the appropriate skills so they may better cope in the future of meat processing. Unlike during my last visit in May 1999, the plant is working at near full capacity. In fact, he is operational now in January 2000. He stated he is very interested in learning how to produce value-added sausage product. The plant has a fully functional sausage-making kitchen that is unused. He asked for suggestions on where he might be able to get hands-on experience in sausage making. He stated he was not interested in someone showing the staff, but more likely, he would like to work in a real life sausage kitchen and get direct experience.

He is very interested in and committed to quality control issues and sanitary improvement. He has installed in the plant a fully functional laboratory. He does quality checks on his production. He is prepared to go to HACCP training to learn what this is about. He wants to know how this can be of benefit to his business. This is the facility I noted in my past report that I considered nearer to world standards than is generally known.

He was a major factor in the establishment of MAME and is vice-president. The current makeup of MAME members should be able to cooperate to focus on reducing the impediments to increasing exports, he said.

APPENDIX B—Interview with L. Ganpurev, Vice-President and Badraa Boldbaatar, Vice-Director, Darkhan Meat-Expo, Darkhan-UUL Province (200 Kilometers from UB)

The firm is a charter founder of the MAME. The management feels it is clear they will continue to have to sell to Russia, but do agree they need to expand products and diversify the customer base. They feel this can be accomplished with cooperative efforts through MAME. They are willing to take whatever steps are needed to reach the goals of MAME. They are in agreement and are convinced that MAME can articulate their interests better than they themselves.

This year the firm is operating near slaughter volume. Based on the data given at the interview, the slaughter of 40,000 cattle this season is 80 percent of capacity. The normal slaughter season of 15 July through 31 December was adhered to. The firm has 365 full-time staff, with the addition of 50 to 75 seasonal employees. This season, 90 percent of the production was exported to one traditional customer in IRKUTSK, Siberia. Last season they shipped 40 percent as value-added boneless product, but this season it dropped to 10 percent. Payment takes 30 to 90 days after delivery, and some barter for gasoline was successfully accomplished. They showed me the boning facility (boneless workshop) which has a capacity of 20 tons per two-shift day. This operation was updated in 1995-96 with a Japanese-Mongolian cooperative project and was very modern and equivalent to any Western facility. The Japanese have purchased boneless horsemeat on an experimental basis. However, they had to use their own veterinary inspectors from Japan to comply with Japanese import requirements. This makes the price inefficient and is possibly why it has not expanded sales.

Only a small fraction of the output is sold on the domestic market. Bones for soup and offal items are sold at the door to local wholesalers and/or to Chinese cash buyers. The expansion of more domestic business is hindered by the illegal slaughter of animals sold at the nearby city market. Value-added sausage products are sold, but most of the capacity (three to four tons per day) of the sausage kitchen remains unused. This season about 100 tons of sausage was sold (about 26 percent of capacity).

APPENDIX C—Meeting with Membership¹³ of Mongolia Association of Meat Exporters (MAME)

January 11, 2000

Meeting was held at Hotel Tsushin, UB, Mongolia. I updated the attendees as to the progress of getting commitments from various Mongolia government agencies and commitments from ACDI/VOCA and the Gobi Initiative Project. The Agriculture Policy Ministry said they would supply a liaison to MAME as well as a food desk officer to assist in the export documentation issues. He also committed to issue “Certificates of Attendance” to ensure attendance to training that MAME sponsored. He also committed to use his position to support any changes in regulations needed to lubricate export transactions.

The External Affairs Ministry confirmed support for the notion of training Embassy Trade Officers to promote Mongolian meat products in the country of assignment. He also appointed a liaison to work directly with MAME. Additionally, he welcomed any training supplied by donor organizations that augmented their own training programs. The third Ministry, Veterinary Service, needed no explanation, since MAME was present when the Ministry committed to have government-trained and -employed inspectors at each export facilities kill floor to give ante-mortem and post-mortem examinations to every animal and certify it “healthy at time of slaughter.” This was a major coup, in the author’s opinion. He said that they would start the process of changing regulations and would institute a training program for inspectors to learn Western ante- and post-mortem requirements. He said that the process would be completed before year’s end. In other words, by the beginning of 2001, Mongolian export plants could be equivalent to Western requirements.

I discussed with the members the second half of the inspection equation—the sanitary food and labeling requirements. I pointed out that HACCP planned operations can use their own inspectors but be monitored by government inspectors. I mentioned that if they attended and implemented HACCP programs, they have a good chance to be considered equivalent to Western standards. These two major changes in Mongolian meat inspection regime would push Mongolia inspection standards ahead 50 years. The issue of “disease free” zones is more complicated. However, the Veterinary Ministry has committed to apply for approval from USDA and commits to develop programs to address these issues. We then discussed the feasibility and benefits of creating cooked products for export. Tinned foods are a very common export item and bypass most of the disease-free-zone issues. The manufacture of dry sausage and/or snack foods is also a product that might be exported with fewer problems from disease-free issues.

¹³ Present were BC Mongolia, Bagakhangai, Darhan, Dornyn, Consulting Unit, Makin Trade, and Managing Director

APPENDIX D—Interview with Mr. Bayarsaikhan, Founder, Eviin Huch Co., LTD.

January 12, 2000 (Tel 970-1-457-682)

This gentleman was a strong supporter of the MAME concept. Each firm working alone on the export issues of Mongolia reminds him of the industry being “lost in the woods.” He feels that to date there has been little government support for the industry problems. He claims that there are two sets of issues to be addressed, one being the plant sector issues and the other being the livestock sector issue. Planning as to the problems in the livestock sector with respect to veterinary services and herd improvement is nonexistent. The fact that the industry operates on a seasonal basis in the end is suicidal.

His operation is now full time. He is currently slaughtering hogs that he raises in confinement feeding operation. He is integrated in that he grows wheat and soybeans to feed the hogs. He presently has 2,500 piglets. His current stock is 270 market ready hogs (90-100 kilograms that yield a 65-kilogram carcass). He plans to build his hog feeding operation to an inventory of 500 hogs. He is selling the carcasses to Siberia, and the price he is receiving is reasonable, \$1200/ton. He also is shipping to domestic market in UB.

He is willing to “bite the bullet” and install HACCP type programs in the plant and supports the transferring of veterinary plant inspector to government control in order to upgrade the sanitary level acceptance of the Mongolian meat export processor industry.

MAME should take on the industry problems and seek solutions in a cooperative way between the members and the government. Better, use of inedible drop from the slaughtering operations should receive the highest priority from the MAME prospective. This issue remains the largest leakage of industry profits to date. There are multitudes of issues that need to be addressed, and he supports MAME because he feels it is the proper forum to get results.

APPENDIX E—Interview with Mr. D. Gerel, Deputy Director, Meat Processing Combinat, Makhimpex
January 12, 2000

This firm seems to have been the victim of all the ills in the Mongolian meat-processing sector. They appear to have an extreme working capital shortage. This past season they produced only 1,000 tons of beef carcass and exported 500 tons, with the balance still in inventory. However, they did slaughter 20, 000 cattle and 40,000 sheep and goats on a contract basis for others. They also store products in their large freezer facilities for other firms. They are solidly behind the MAME concept and are a founding member. They feel strongly that MAME can address many of the problems that they face. In particular, they hope that the actions of MAME could stabilize the prices in the Russian market. Another issue is the Chamber of Trade, which has raised fees for the export documentation services that they feel were unjustified. They also point out that they have invested in a laboratory facility and should be able to make their own laboratory result certifications for export and not have to pay an outside agency's high fees.

The deputy director prioritized the issues that need to be addressed for his company to be again successful. A program of rejuvenation and new equipment and technology is needed. Additionally, they need working capital so that they might re-conquer the lost domestic markets of processed branded products. This would allow extension of the duration of the factory's production period (avoid seasonality) for more efficient use of the facilities. This is the only facility known to me that has tinned meat capability. This will be an important element of the MAME proposed strategy for exporting tinned meats.

He hopes that MAME will provide the leadership to examine new packing and packaging opinions that might be applicable in Mongolian situation. He fully expects that MAME will be instrumental in diversifying the marketplace so that processors have more selling options. Finally, he hopes that cooperation with government ministries will move closer to seeing improvement in the animal quality and veterinary service provided to the industry.

ANNEX AA—Website Address For Selected Countries' Import Requirements

How to use the Export Library

The countries' extra processing requirements are available in two formats—a text (TXT) format and the Adobe PDF format. The text format can be read with any browser; the PDF format uses the [Adobe Acrobat Reader](#). Both formats contain the same information in the same order, but the PDF format maintains the indentation of the original document and highlights the revisions from the previous document, and so is much easier to read. The Acrobat Reader is available for free download—you can download it now by clicking on the highlighted Adobe Acrobat Reader link above.

All of the countries that have notified FSIS of their extra requirements and/or their approved plant lists are listed below. Country extra processing requirements are listed in both reverse chronological order and in alphabetical order under the headings "Country Requirements -- Chronological Order" and "Country Requirements -- Alphabetical Listing." When you review a requirements document, click on either the PDF format or the TXT format. Plant lists are similarly listed under "Plant Listing -- Chronological Listing" and "Plant Listing -- Alphabetical Listing." Finally, FSIS Notices to exporters, with important information regarding export to certain countries, are listed in reverse chronological order with a title explaining their content.

Country Requirements Changed in the Last Calendar Year in Chronological Order (See ALPHABETICAL LISTING for all country requirements.)

- **13 January 2000:** European Union Requirements with Questions & Responses, Korea
- **7 January 2000:** Latvia, Chile
- **4 January 2000:** Poland
- **17 December 99:** Korea, Panama, People's Republic of China, South Africa
- **8 December 99:** Korea, Ghana
- **24 November 99:** Russia, Estonia, Romania, Morocco, Venezuela, Brazil, Lithuania
- **2 November 99:** Thailand
- **22 October 99:** Venezuela
- **19 October 99:** Peru
- **8 October 99:** Korea, Singapore, Poland,
- **1 October 99:** Russia, Switzerland, Peru
- **23 September 99:** European Union Requirements with Questions & Responses, French Polynesia (Tahiti)

- **17 September 99:** Panama
- **15 September 99:** Peru, Colombia
- **10 September 99:** Azerbaijan, Peru, Republic of Korea
- **31 August 99:** Singapore, Peru, Senegal
- **30 July 99:** European Union Requirements with Questions & Responses, Slovenia, Ghana
- **21 July 99:** South Africa, Uruguay
- **2 July 99:** Taiwan
- **17 June 99:** Mexico, Republic of Korea
- **7 June 99:** Latvia, Romania
- **19 May 99:** Mexico, Russia
- **2 May 99:** Mexico, Panama, Hong Kong, Guatemala, Dominican Republic
- **22 April 99:** Taiwan
- **16 April 99:** Mexico, Japan,
- **2 April 99:** South Africa
- **26 March 99:** Algeria, Brazil, Russia, Chile
- **26 Feb. 99:** Canada, Canada - Special Import Procedures, Russia
- **22 Jan. 99:** South Africa, France

Country Requirements -- Alphabetical Listing

- **A** Albania, Algeria, Argentina, Australia, Austria, Azerbaijan
- **B** Bahrain, Belgium, Brazil
- **C** Canada, Canada - Special Import Procedures, Chile, Colombia, Costa Rica, Cyprus, Czech Republic
- **D** Denmark, Dominica, Dominican Republic
- **E** Ecuador, Egypt, El Salvador, Estonia, European Union Requirements with Questions & Responses
- **F** Fiji, Finland, France, French Polynesia (Tahiti)
- **G** Germany, Gibraltar, Greece, Grenada, Guatemala, Guyana, Ghana
- **H** Haiti, Honduras, Hong Kong, Hungary
- **I** Indonesia, Iran, Iraq, Ireland, Israel, Italy, Ivory Coast

- **J** Jamaica, Japan, Jordan
- **K** Kenya, Kiribati, Republic of Korea, Kuwait
- **L** Latvia, Lebanon, Lithuania, Luxembourg
- **M** Malaysia, Malta, Martinique, Mauritius, Mexico, Monaco, Morocco
- **N** Netherlands, Netherlands Antilles, New Caledonia, New Zealand, Nigeria, Norway
- **O** Oman
- **P** Pakistan, Panama, People's Republic of China, Peru, Philippines, Poland, Portugal
- **Q** Qatar
- **R** Romania, Russia
- **S** Saudi Arabia, Senegal, Singapore, Slovak, Slovenia, South Africa, Spain, St Vincent Island, Suriname, Sweden, Switzerland
- **T** Tahiti (See French Polynesia), Taiwan, Thailand, Trinidad, Turkey
- **U** Ukraine, United Arab Emirates, United Kingdom, Uruguay
- **V** Venezuela
- **W** Western Samoa
- **Y** Yugoslavia

Eligible Plant Listings Changed in the Last Calendar Year in Chronological Order (See ALPHABETICAL LISTING for all plant lists.)

- **25 January 2000:** European Union
- **7 January 2000:** Latvia
- **17 Sept. 99:** South Africa
- **13 August 99:** Mexico, Switzerland
- **17 June 99:** Switzerland, European Union - Casings, European Union
- **7 June 99:** Switzerland, Canada -- Import Reinspection
- **25 May 99:** Israel, Australia
- **19 May 99:** European Union

- **22 April 99:** Russia-Pork
- **2 April 99:** European Union
- **26 Feb. 99:** Russia-Poultry, European Union - Casings
- **5 Feb. 99:** European Union, Mexico

Eligible Plant Listings -- Alphabetical Listing

- Argentina, Australia, Austria, Belgium, Brazil, Canada -- Import Reinspection, Denmark, Estonia, European Union, European Union - Casings, France, Germany, Gibraltar, Greece, Ireland, Israel, Italy, Latvia, Malaysia, Mexico, Portugal, Russia-Pork, Poultry, South Africa, Spain, Switzerland, United Kingdom

Export Notices

- 2000-2: New Documentation for the Peoples Republic of China
- 2000-1: Additional Residue Testing for the European Union in EU Approved Pork Plants
- 99-20: Restrictions on Poultry Exports Due to Infectious Laryngotracheitis
- 99-19: Update of Export Notice 99-17- New Documentation Required for Export to Poland
- 99-18: Availability of Year 2000 Printing of FSIS Form 9135-3 Canadian Export Certificate
- 99-17: New Documentation Required for Export of Red Meat, Poultry, Edible Processed Proteins, and Inedible Animal Products to Poland
- 99-16: "Non-Hormone Treated Cattle (NHTC)" Program for Export of Beef and Veal to the European Union
- 99-15: New Documentation Requirements for Export of Red Meat and Red Meat Products to the Republic of Korea
- 99-14: Suspension of Beef Exports to the European Union under the Hormone Free Cattle Program
- 99-13: Update: Outbreak of Exotic Newcastle Disease in California
- 99-12: Update: Testing for Avian Influenza and Export of Poultry to Mexico
- 99-11: Update: Reported Cases of Vesicular Stomatitis and Restrictions on Exports
- 99-10: Update: Testing for Avian Influenza and Export of Poultry to Mexico
- 99-9: Export Certification for Imported Natural Casings
- 99-8: Update: Testing for Avian Influenza and Export of Poultry to Mexico
- 99-7: Modifications to the European Union Guidelines - Residue Testing

- 99-6: Update: Export of Casings to the European Union
- 99-5: Export of Fresh/Frozen Pork Meat to the Russian Federation
- 99-4: Export of Casings to the European Union
- 99-3: Testing for Avian Influenza and Export of Poultry to Mexico
- 99-2: Update - Testing for Avian Influenza and Export of Poultry to Mexico
- 99-1: Testing for Avian Influenza and Export of Poultry to Mexico
- 98-17: Availability of 1999 Printing of FSIS Form 9135-3 Canadian Export Certificate
- 98-16: Update: Reported Cases of Vesicular Stomatitis and Restrictions on Export
- 98-15: Update: Outbreak of Exotic Newcastle Disease in California
- 98-14: Update: Reported Cases of Vesicular Stomatitis and Restrictions on Exports
- 98-13: Update: Outbreak of Exotic Newcastle Disease in California
- 98-12: Update: Outbreak of Exotic Newcastle Disease in California
- 98-11: Update: Reported Cases of Vesicular Stomatitis and Restrictions on Exports
- 98-10: Update: Outbreak of Exotic Newcastle Disease in California
- 98-9: Elimination of "Delistment/Relistment" List for Canadian Export Eligibility
- 98-8: Update: Vasicular Stomatitis and Export Restrictions
- 98-7: Export of Meat and Poultry to U.S. Military Installations
- 98-6: Newcastle Disease Outbreak in California, June 7, 1998
- 98-3: Russia: Holding requirements after Trichina testing
- 97-25: EU certificates available with blue seal
- 97-24: Specific Risk Material statements for meat to UK
- 97-15: Trichinae Analysis Sampling Program for Raw Pork Meat for Export to Russia, 28 Aug 1997
- 97-6: European Union Exports, 1 Apr 1997

FSIS Directives Related to the Export of Meat and Poultry

- 9010.1: Export Products Returned to the United States, Issued 5/26/99
- 9000.1: Export Certification, Issued 9/9/99

ANNEX BB—TINNING METHODOLOGY

Base Plate

General

The metal container used for canned meat is not made of tin alone, as in “tin can,” its common designation, implies. It is made from sheet metal bearing a thin coat of pure tin that is about 0.5 to 1.5 percent of the total weight.

Types of Plate

The cans used are made from sheet steel that has been given three different kinds of protective treatment:

- 1) The most common type is hot-dipped tin plate, consisting of a cold-rolled steel base, tin-plated by immersion in molten tin. Hot-dipped tin plate bears a greater percentage of tin than electrolytic tin plate does;
- 2) The second kind of can made from sheet steel is plated with tin by an electrolytic process that permits close control of the amount to be applied. Originally, electrolytic tin plate was used only for such products as motor oil, paint, and powders. Can manufacturers have discovered that electrolytic tin plate, when coated with specially designed enamels, is satisfactory for a number of non-acid foods.
- 3) The third kind of sheet steel used in can making bears no tin at all. Instead, it is given a chemical treatment known as bonderizing that deposits a rust-resistant coating on the steel. Both the inside and the outside surfaces of the plate are given additional protection by enameling on both sides. Can ends made of enameled, bonderized steel have proved to be satisfactory for non-acid foods, but can bodies are not yet made of this material because present mass production soldering techniques are not suitable.

Solder

The solder used is usually made of tin and lead. Occasionally, when solder of a lower quality is desired, a percentage of bismuth is incorporated, the amount depending on the melting point required. The sanitary-type can contains solder only on the body seam. The other seams are sealed by the use of special compounds that serve as gaskets in the closures. These sealing operations are done in the can-manufacturing operation, except for the top of the can, which is sealed after the can is filled.

Flux

Flux is used with solder to clean the surface to be soldered, thus allowing the solder to flow smoothly; the smooth flow of solder results in better seals. Flux currently is made of resin dissolved in alcohol.

Types of Meat Cans

General

Two types of cans are used for canned meats: sanitary cans and hole-in-cap cans. Since most canned meats are packed in sanitary cans, we will restrict the discussion to only that type.

Sanitary Cans

Sanitary cans are characterized by solder-free, doubled-seamed ends. They are cylindrical in shape, but may also be rectangular or truncated.

Meat can manufactures depend on large can manufacturing companies for their supply of cans. Three reasons were responsible for this:

- 1) Improvements in refrigeration and other facilities extended the canning season; this extension leaves little or no time in which canneries can manufacture cans.
- 2) The advent of sanitary cans and the accompanying development of intricate, high-speed equipment, which rendered existing can manufacture obsolete.
- 3) The manufacturing of sanitary cans can be carried out better and more cheaply by the can plants than by meat canneries, plus the can companies control or own nearly all patents on can-closing machines.

Can Line

Sanitary cans are produced by automatic machines installed in sequence so that it is possible to feed standard-sized sheets of tin plate at one end and get finished cans at the other. Human labor is used only for tending the machines, the actual production being done entirely by the machines. Can ends and bodies are manufactured in separate sequences.

- 1) The can ends are made by cutting and stamping machines that create the desired form. A liquid-rubber compound is then applied around the inside edges of the ends and quickly solidified in special drying machines. The completed ends are then held until can bodies are ready to receive them.
- 2) The can body is produced in the following operation:
 - A) Slitting: Sheets of the tin plate are fed into a slitting machine that cuts them into sections called body blanks, from which the can bodies are made.
 - B) Bodymaking: Can bodies are made in three steps: First, the ends of the body blanks are notched and cut. Next, the ends are bent back in opposite directions. Finally, the body blank is pressed around a die called the bodymaker, and the bent ends are engaged and bumped solidly together to form a seam of the can body.

- C) Soldering: The can body is passed over a wheel that applies flux to the body seam. Solder is then applied to the seam by a roller revolving through a solder bath.
- D) Flanging: The can bodies are feed to a flanging machine that curls their ends outward
- E) Double-seaming: The bottom ends are then double-seamed to the can bodies. This is a solderless juncture made by folding and rolling together the flange of the can body and the edges of the can end. The rubber compound around the inside edge of the can end acts as a gasket and effects a hermetically seal.
- F) Testing: The finished can is tested by a machine, which rejects the faulty cans by means of an air pressure arrangement.

Enameling

General

Enameling serves two main purposes: First, it protects discoloration and other undesirable reactions in the product; second, it helps to reduce loss in some products from hydrogen swellers. Enameled cans are produced in the usual manner by using standard-sized sheets of tin-plate, one side of which has been enameled.

The sheets are enameled in two steps: First, the desired enamel is lithographed on the sheets; second, the coated plates are conveyed through special ovens and heated until the enamel is baked on the tin. The base of all enamels used in meat cans must be insoluble, inert, elastic, hard, and thoroughly adherent; otherwise it would be impossible to fabricate cans from the enameled sheets without considerable damage to the enamel.

Types of Enamels

There are two types of enamel that have considerable general use. The most common type is standard, or sanitary enamel. Its principal use is to prevent fading of the bright colors characteristic of fruits, berries and vegetables. The other common type is C-enamel. It contains chemicals to prevent discoloration of sulfur-bearing products caused by action of the sulfur on the minute areas of exposed iron present in the tin plate to form iron sulfide. Enamels for canned meats are variations of these basic enamels; each one is intended for a particular type of canned meat product. For example, enamels for canned-pork products are sulfur-resistant and designed to prevent discoloration.

Preparing Inner Surface of the Cans

Some products tend to stick to the interior of the cans unless preventive measures are taken. In these instances, lard or some other edible fat or gelatin is used to coat the interior. This coating can be applied by hand or by a spraying service.

Vacuum Requirements

Thermal Exhausting

Hot packed products may require no additional heating if they are taken directly from the cooking vessels, filled, and sealed immediately. The condensation of steam within the cans and the contraction of the hot product on cooling will result in sufficient vacuum to preclude the need for additional exhausting. In some cases, however, it is necessary to heat the filled cans additionally before sealing them. This may be done by placing them in exhaust boxes that contain hot water, usually heated by the injection of steam, or are filled with perforated steam pipes that direct steam at the sides of the cans. These pipes should be placed as close as possible to the cans.

Mechanical Exhausting

Mechanical exhausting is accomplished by specially designed machines. After the cans are filled, the covers are clinched on loosely and the cans are fed into the vacuum chamber of the machine, which is preset to the degree of vacuum desired. The cans are then sealed while in the chamber. This method of vacuuming the can is more expensive, though faster, and is used when floor space is at a minimum.

Retort operation time and temperatures will be given in recipes.

Luncheon Meat (Spam Type)

The meat used in canned luncheon meat is either all pork or a mixture of pork and beef. The pork is usually fresh shoulder meat. Sometimes a small number of heavy hams are mixed into the pork used. Cannier and Cutter (usually Mongolian beef) that has been trimmed to less than 10 percent trimmable fat is used as the beef component. The meat is finely chopped (silent cutter); during the chopping time, the seasoning and curing ingredients are added. Sodium nitrate is used as the curing ingredient and salt (3.5 percent) and pepper are used as the seasoning. After being chopped, the meat is placed in a vacuum mixer and thoroughly mixed to remove as much air as possible. It is then placed in a cooler and allowed to stand for 72 hours as a curing period. It is then re-mixed in the vacuum mixer and put into the cans. The temperature of the meat going into the cans must not exceed 3.3C. Cans are vacuum-sealed and processed.

ANNEX CC—Sample Ontario Marketing Board Activities

Few consumers are aware of the number and variety of marketing boards that exist in Ontario. Their functions are as varied as the products they represent. Twenty-one marketing boards are administered under the *Farm Products Marketing Act* and the one marketing board for milk and farm-separated cream is administered under the *Milk Act*. The basic objectives of these producer-elected boards are to: 1) stabilize farm prices in keeping with costs of production; 2) assure continuity of supply; and 3) stimulate a more efficient marketing system.

Six marketing boards settle prices and/or terms and conditions of sale with processors through negotiated agreements or if necessary, by arbitration. These boards do not control production. Ten boards have the power to establish prices, but not all do. Six boards establish or negotiate prices while regulating supply through protection and marketing quotas. The following Figures 2 through 4 illustrate how each board is functioning.

Table 2—Negotiating Boards

Negotiating Boards	Secretary/Manager	Functions
Grape Growers' Marketing Board (Processing)	J. Rainforth Box 100 Vineland Station L0R 2E0 (905) 688-0990 (905) 688-3211 (fax)	Negotiates minimum prices and prescribes terms and conditions of sale to licensed processors in Ontario for 20 classes of grapes. Buyers contract directly with growers, with payments to the grower made through the Board. Promotes sale of Ontario wine and grape juice products.
Potato Growers' Marketing Board (Processing)	L. Armstrong 57 Brant Street Burlington L7R 2G8 (905) 637-5609 (905) 637-7653 (fax)	Negotiates minimum prices, terms and conditions of sale, on a company specific basis, for potatoes contracted for processing into soups and stews, chips and pre-peeled. Contributes to the research of processing varieties of potatoes.
Tomato Seedling Growers' Marketing Board	L. Baird Box 157 Leamington N8H 3W2 (519) 326-4481 326-3413 (fax)	Negotiates minimum prices, terms and conditions of sale, on a company specific basis, for Ontario grown tomato plants used in the production of processing tomatoes.
Seed Corn Growers' Marketing Board	Mary Lynn Lister 785 St. Clair Street R.R. #7 Chatham N7M 5J7 (519) 352-6710 352-0526 (fax)	Negotiates growing premiums, terms and conditions of sale and charges related to contracts, on a company specific basis, for seed corn production in Ontario.
Soybean Growers' Marketing Board	F. Brandenburg Box 1199 Chatham N7M 5L8 (519) 352-7730 (519) 352-8983 (fax)	Negotiates pricing formula, terms and conditions of sale for soybeans and charges for cleaning, handling and drying by dealers. Promotes and develops a market for soybeans for export and human consumption.

Continued on next page

Continued from previous page

Negotiating Boards	Secretary/Manager	Functions
Vegetable Growers' Marketing Board (Processing) (green and wax beans, lima beans, red beets, cabbage, carrots, peppers, cauliflower, sweet corn, cucumbers, green peas, pumpkin, squash and tomatoes)	J. Mumford 435 Consortium Court London N6E 2S8 (519) 681-1875 (519) 685-5719 (fax)	Negotiates prices, terms and conditions of sale, on a company specific basis, for 13 vegetables grown for processing. Regulates all agreements entered into between producers and processors. Administers by regulation term contracts. Processors contract directly with individual growers.

Table 3—Boards That Establish Price

Boards That Establish Price	Secretary/Manager	Functions
Apple Marketing Commission	B. Cotterill 7195-B Millcreek Drive Mississauga L5N 3R3 (905) 858-1060 (905) 858-3299 (fax)	Establishes prices to wholesale and retail buyers. Collects license fees from producers on an acreage basis. Promotes consumption of apples.
Asparagus Growers' Marketing Board	J. Butler 71-C Front Street West Strathroy N7G 1X6 (519) 246-1640	Establishes prices, terms and conditions of sale for asparagus grown for processing. Contracts with processors for purchase of asparagus through the Board. Promotes marketing of fresh and processed asparagus. Contributes to development of new asparagus varieties in Ontario.
Bean Producers' Marketing Board	M. Huzevka 140 Raney Crescent London N6L 1C3 (519) 652-3566 (519) 652-9607 (fax)	Markets, through its appointed agents, all white pea beans delivered to elevators and stored for the Board. Offers for sale by tender a specific quantity and price in light of domestic and foreign competition. Pools returns from sales and pays to the growers the price received for the beans less service charges and license fees.
Fresh Grape Growers' Marketing Board	A. Huisman Box 100 Vineland Station L0R 2E0 (905) 688-0990 (905) 688-5915 (fax)	Establishes prices, terms and conditions of sale for grapes sold on the fresh market. Conducts sales through appointed agents. Promotes consumption of fresh grapes.
Fresh Potato Growers' Marketing Board	W. L. Armstrong 570 Brant Street Burlington L7R 2G8 (416) 637-5609 (416) 637-7653 (fax)	Establishes prices of fresh potatoes and may determine different prices for different parts of Ontario. Encourages research, quality improvement and market development. Provides marketing information to producers.

Continued on next page

Boards That Establish Price	Secretary/Manager	Functions
Greenhouse Vegetable Producers' Marketing Board	Denton Hoffman 139 Oak Street West Leamington N8H 2B8 (519) 326-2604 (519) 326-7842 (fax)	Establishes prices after consultation with packer-shippers and wholesalers and reviewing market conditions. Appoints agents for the sale of greenhouse tomatoes and seedless cucumbers. Promotes consumption of seedless cucumbers and pink and red greenhouse tomatoes.
Tender Fruit Producers' Marketing Board (peaches, pears, plums and sweet and sour cherries)	J. Rainforth Box 100 Vineland Station L0R 2E0 (905) 688-0990 (905) 688-3211 (fax)	Establishes prices, terms and conditions of sale for tender fruit sold for processing and the fresh market. Processors contract directly with individual growers, with all payments to the growers made through the Board. Promotes consumption of fresh and processed tender fruit.
Wheat Producers' Marketing Board	W. McClounie 880 Richmond Street Chatham N7M 5K8 (519) 354-4430 (519) 354-0675 (fax)	Conducts all sales of Ontario-produced wheat through its appointed agents. Determines domestic and export prices in response to international market conditions. Pools returns from sales and pays growers the price for wheat less all service charges.
Pork Producers' Marketing Board	J. DenTandt 15 Waulron Street Etobicoke M9C 1B4 (416) 621-1874 (416) 621-6869 (fax)	Sells live hogs on a graded basis through electronic auction system and establishes weekly pooled prices. Supplies some hogs for shipment to market by contract with packers. Promotes sale of pork with emphasis on quality and nutritional value of Ontario Pork.
Sheep Marketing Agency	Maloney 130 Malcolm Road Guelph N1K 1B1 (519) 836-0043 (519) 824-9101 (fax)	Appoints sales agents through which sheep and wool are marketed. Sheep and wool sold through open market pricing. Provides marketing information to producers. Promotes consumption of lamb.

Table 4—Boards That Regulate Production With Marketing Quotas

Boards That Regulate Production With Marketing Quotas	Secretary/Manager	Functions
Broiler Hatching Egg & Chick Marketing Commission	R. J. Bennett 251 Woodlawn Road West Suite 213 Guelph N1H 8J1 (519) 837-0005 (519) 837-0464 (fax)	Allots production and marketing quotas to breeder growers and hatching egg producers. Establishes hatching egg and chick prices. Establishes terms and conditions of standard contracts between producers and hatcheries. Issues licenses to hatcheries and broker/dealers of the regulated product.
Chicken Farmers of Ontario	W. V. Doyle 3380 South Service Road Burlington L7R 3Y8 (905) 637-0025 (905) 637-3464 (fax)	Participates in the Chicken Farmers of Canada Agency. Negotiates live prices for various weight categories with processors on a regular basis. Regulates production by means of quota. Promotes consumption of chicken.
Egg Producers' Marketing Board	B. Ellsworth 7195 Millcreek Drive Mississauga L5N 4H1 (416) 858-9790 (416) 858-1589 (fax)	Allots Ontario's share of national quota by regulating hen numbers to individual producers holding production quota. Establishes price based on national cost of production formula for Grade A eggs. Participates in Canadian Egg Marketing Agency. Promotes consumption of eggs.
Flue-Cured Tobacco Growers' Marketing Board	D. Lindsay Box 70 Tillsonburg N5G 4H4 (519) 842-3661 (519) 842-7813 (fax)	Establishes annual crop target as a result of negotiations with the Canadian Tobacco Manufacturers Council and allots poundage quota to individual growers. Negotiates guaranteed minimum average price for total crop and guaranteed minimum grade prices for approximately 70 tobacco grades. Conducts Dutch Clock Auction at two locations for the sale of the tobacco crop. Promotes export market development.
Dairy Farmers of Ontario	John Karn 6780 Campobello Road Mississauga L5N 2L8 (905) 821-8970 (905) 821-3160 (fax)	Allots provincial quotas to producers. Establishes prices to fluid milk processors using cost of production formula as a guide. Negotiates price of farm-separated cream with processors. Buys all milk and cream sold off the farm in Ontario and sells it to dairies and processing plants. Participates in a National Milk Supply Management Program for Industrial Milk. Promotes consumption of milk.

Continued on next page

Continued from previous page

Boards That Regulate Production With Marketing Quotas	Secretary/Manager	Functions
Turkey Producers' Marketing Board	J. White 60 New Dundee Road R.R. #2 Kitchener N2G 3W5 (519) 748-9636 (519) 748-2742 (fax)	Allots Ontario's share of national marketing quota to producers holding production quota. Establishes prices based on a cost of production formula and on discussion with processors regarding market conditions. Participates in Canadian Turkey Marketing Agency. Promotes consumption of turkey.

ANNEX DD—USMEF Fact Sheet, Mission Statement, Member Services, And Application

USMEF Fact Sheet

The U.S. Meat Export Federation (USMEF) is a nonprofit, international trade organization working to identify and develop international markets for U.S. beef, pork, lamb, and variety meats.

Who Does USMEF Represent?

USMEF is the most vertically integrated trade association in the meat and livestock industry. USMEF represents livestock producers; meat packers, processors, purveyors and traders; feedgrain and oilseed promotional groups; farm organizations; and agribusiness companies.

Where is USMEF Located?

Based in Denver, Colorado, USMEF has international market development offices located in Tokyo, Osaka, Mexico City, Hong Kong, Seoul, Singapore, London, Shanghai, Moscow, and Taipei. USMEF also has representatives in the Middle East, South America, Canada, and the Caribbean.

How Does USMEF Increase U.S. Red Meat Exports?

USMEF carries out market development activities in more than 50 countries. These activities fall into three primary areas:

<i>Marketing</i>	Creating demand in international markets for U.S. meat through promotions, trade seminars, consumer education, advertising, and public relations;
<i>Trade Servicing</i>	Working to bring buyer and seller together and conducting both market and product research;
<i>Market Access</i>	Providing the U.S. government and the U.S. industry with the market intelligence necessary to secure, maintain and develop fair and reasonable access to international markets.

How is USMEF Funded?

USMEF receives funding from a variety of sources including membership dues, private contributions, and commodity checkoff programs. As a cooperator with the U.S. Department of Agriculture, USMEF also receives funds from USDA's Market Access and Foreign Market Development Programs.

How Do Red Meat Exports Benefit the Industry?

Given domestic production levels and demand in 1997, U.S. beef exports contributed **\$77.16/head** to the value of fed cattle, **\$68.85/head** to feeder cattle

and **\$53.80/head** to calves. U.S. pork exports in 1997 also added **\$15.72/head** to the value of the average market hog.

U.S. beef and beef variety meat exports accounted for **11.9%** of the wholesale value of U.S. beef production in 1997. U.S. pork and pork variety meat exports accounted for **9.3%** of the wholesale value of U.S. pork production.

Red meat exports also benefited U.S. grain and soybean producers. U.S. feedgrain exported through U.S. red meats in 1997 equaled **251.1 million** bushels, valued at **\$652.8 million**. U.S. soybeans exported through U.S. red meats in 1997 amounted to **27 million** bushels valued at **\$199.5 million**.

CONTACT: K.T. Miller, Director, Information Services

U.S. Meat Export Federation Mission Statement

The mission of the U.S. Meat Export Federation is to enhance the ability of the United States to export wholesome, high quality meats and red meat products.

GOALS AND OBJECTIVES

- Annually identify the priority markets for U.S. red meats and further processed meat products, and develop and implement marketing plans that will increase exports to these markets.
- Identify existing and potential trade barriers and work with the appropriate federal agencies and industry organizations to seek their elimination.
- Seek technical and market development related research proposals, serve as an international research clearing house to prevent excess duplication, and develop an information distribution system insuring that research results are made available for use by the industry.
- Increase financial support to MEF so the U.S. red meat market development activities can be expanded and adequately implemented.
- Carry out a communications program to increase support and understanding among MEF members and the industry for the importance of red meat exports and MEF activities.

U.S. Meat Export Federation Member Services

Market Access—Removing Trade and Technical Barriers

- tariffs and quotas
- labeling requirements

- health and sanitation issues
- non-tariff barriers aimed at keeping imports out

Trade Servicing - Bringing Buyer and Seller Together

- trade leads
- foreign market studies and consumer research
- technology updates and transfers
- assistance with product claims
- information on new industry developments in the U.S. for foreign buyers
- trade team visits and seminars
- information on other export countries' market development activities
- information on and assistance with product shows
- updated list of meat importers by country

Product Promotion—Stimulating Demand for U.S. Products

- branded product promotions
- advertising
- trade seminars and joint promotions
- supermarket sampling and point-of-sale materials
- publicity campaigns
- newsletters and instructional material for foreign buyers

U.S. Meat Export Federation Application

Join Today!!

Today's Date _____

Company/Organization: _____

Address: _____

City, State, Zip: _____

Phone: _____ Fax: _____

USMEF Representative: _____

Title: _____

Membership renewal date is October 1. Dues are pro-rated for members who join during any month except October. Please contact Bruce Cobb at (303) 623.6328 to determine the pro-rated dues for your company.

MEMBERSHIP CATEGORY *(Please check category of membership below.)*

_____ **\$6,000 Company, Individual, or Organization Membership**

_____ **Agribusiness/Export Services**

_____ **Cattle Production**

_____ **Farm Organization**

_____ **Feed Grain/Oilseed Production**

_____ **Hog Production**

_____ **Sheep Production**

Each additional \$6000 contribution entitles the member to one additional seat on the Board of Directors.

_____ **Packer/Processor & Purveyor/Trader Membership. * Please complete back of form.***

(Determine amount to pay below. Total annual company sales include domestic and international sales of beef, pork, lamb, and other red eats.)

_____ **\$3,000 (Total annual company sales below \$100 million)**

_____ **\$4,000 (Total annual company sales of \$100 million to \$499 million)**

_____ **\$6,000 (Total annual company sales of \$500 million to \$999 million)**

_____ **\$10,000 (Total annual company sales of \$1 billion or more)**

U.S. Meat Export Federation

1050 17th Street, Suite 2200

Denver, CO 80265

Phone: (303) 623-MEAT (6328) Fax: (303) 623-0297

For Packer/Processor and Purveyor/Trader Members Only:

We encourage our members' participation in the Federation's overseas activities. Please assist us in introducing your company to our International Directors by providing the following information.

Briefly describe your company: (Plant(s) location(s), size, years in operation, etc.)

Main Product Lines:

Current export markets:

Markets you are most interested in developing:

Please include **FIFTEEN** copies of your annual report, product brochures, company literature, etc. with your membership application. We will then distribute your materials to our overseas offices.